

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER


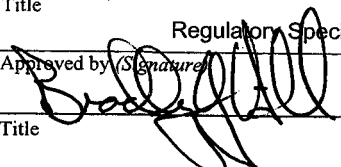
FORM APPROVED  
OMB No. 1004-0136  
Expires January 31, 2004

|  |  |  |
|--|--|--|
| 1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER   |  | 5. Lease Serial No.<br>UTU-020252A   |
| 1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone |  | 6. If Indian, Allottee or Tribe Name<br>N/A                                      |
| 2. Name of Operator<br>Newfield Production Company   |  | 7. If Unit or CA Agreement, Name and No.<br>Jonah Unit                           |
| 3a. Address<br>Route #3 Box 3630, Myton UT 84052   |  | 8. Lease Name and Well No.<br>Jonah Federal I-6-9-17                             |
| 3b. Phone No. (include area code)<br>(435) 646-3721  |  | 9. API Well No.<br>43-013-33495  |
| 4. Location of Well (Report location clearly and in accordance with any State requirements. *)<br>At surface NE/NE (Lot#1) 778' FNL 627' FEL<br>At proposed prod. zone SW/NE 1319' FNL 1311' FEL                       |  | 10. Field and Pool, or Exploratory<br>Monument Butte                             |
| 14. Distance in miles and direction from nearest town or post office*<br>Approximately 13.3 miles southeast of Myton, Utah   |  | 11. Sec., T., R., M., or Blk. and Survey or Area<br>Sec. 6, T9S R17E             |
| 15. Distance from proposed*<br>location to nearest<br>property or lease line, ft.<br>(Also to nearest drig. unit line, if any) Approx. 1311' f/le, 1319' f/unit  | 16. No. of Acres in lease<br>637.35  | 12. County or Parish<br>Duchesne   |
| 17. Spacing Unit dedicated to this well<br>20 Acres  | 18. Distance from proposed location*<br>to nearest well, drilling, completed,<br>applied for, on this lease, ft. Approx. 1204' | 13. State<br>UT  |
| 19. Proposed Depth<br>6180'  | 20. BLM/BIA Bond No. on file<br>UTB000192  |  |
| 21. Elevations (Show whether DF, KDB, RT, GL, etc.)<br>5270' GL  | 22. Approximate date work will start*<br>2nd Quarter 2007  | 23. Estimated duration<br>Approximately seven (7) days from spud to rig release. |

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the authorized officer.

|   |   |                  |
|---|---|------------------|
| 25. Signature<br>           | Name (Printed/Typed)<br>Mandie Crozier  | Date<br>1/9/07   |
| Title<br>Regulatory Specialist  |   |                  |
| Approved by (Signature)<br> | Name (Printed/Typed)<br>BRADLEY G. HILL | Date<br>01-30-07 |
| Title<br>ENVIRONMENTAL MANAGER  |   |                  |

Application approval does not warrant or certify the the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on reverse)

Surf

581759X  
4435203Y  
40.065010  
-110.041302

BULL

581552X  
4435036Y  
40.063530  
-110.043754

Federal Approval of this  
Action is Necessary

RECEIVED

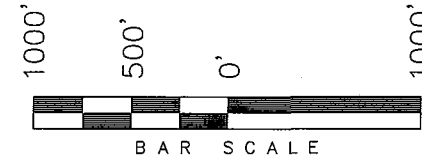
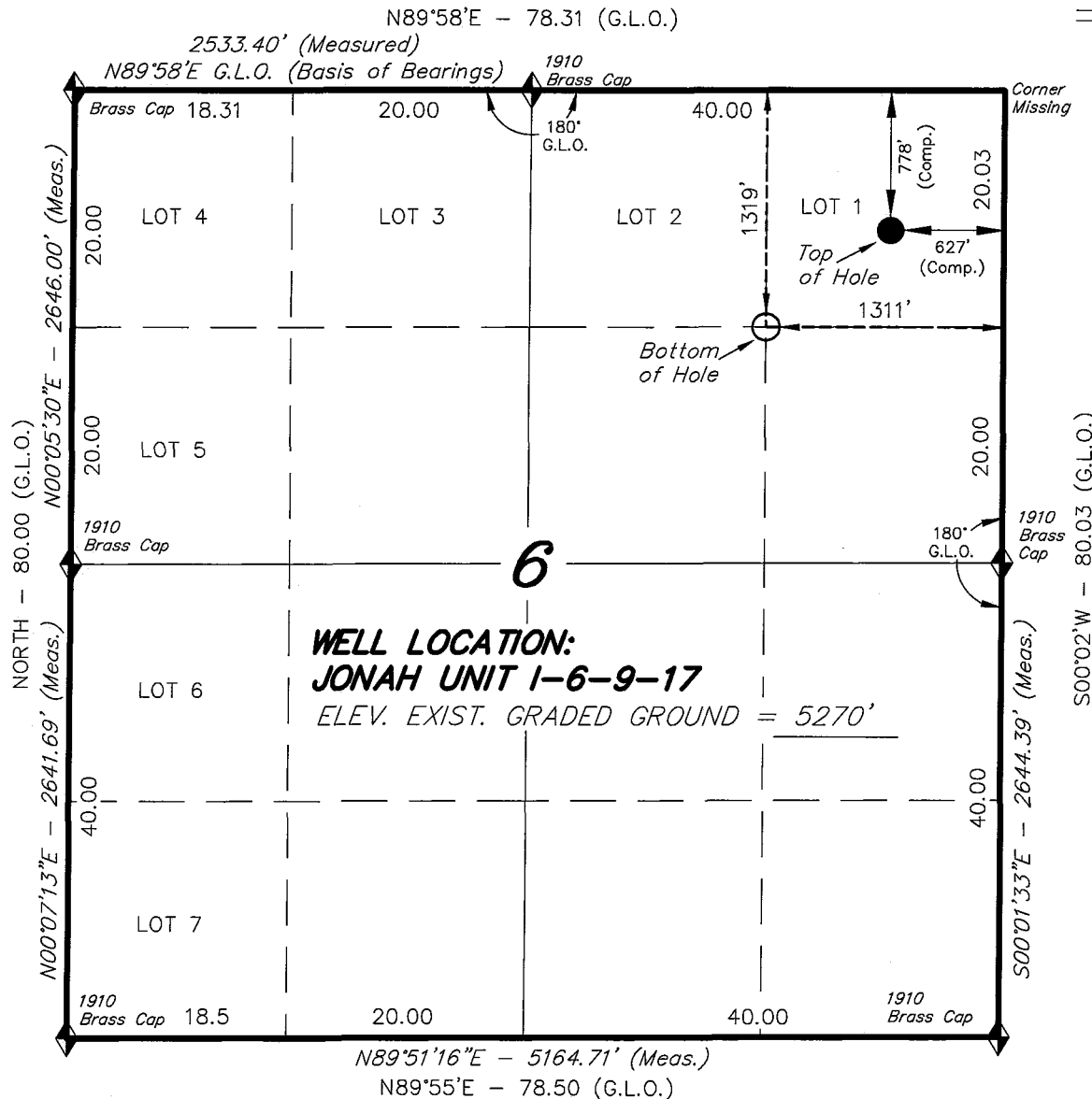
JAN 16 2007

DIV. OF OIL, GAS & MINING

# T9S, R17E, S.L.B.&M.

## NEWFIELD PRODUCTION COMPANY

WELL LOCATION, JONAH UNIT 1-6-9-17,  
LOCATED AS SHOWN IN LOT 1 OF  
SECTION 6, T9S, R17E, S.L.B.&M.  
DUCHESNE COUNTY, UTAH.



### Note:

1. The bottom of hole (1-6-9-17 SW/NE) bears S51°40'29"W 872.26' from the Top of Hole.
2. The Proposed Top of Hole bears S68°41'34"E 2139.11' from the North 1/4 Corner of Section 6.
3. The Proposed bottom of hole bears N44°47'12"W 1857.58' from the North 1/4 Corner of Section 6.

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. No. 189377

STACY W. STEWART  
REGISTERED LAND SURVEYOR  
REGISTRATION No. 189377  
STATE OF UTAH

◆ = SECTION CORNERS LOCATED

BASIS OF ELEV;  
U.S.G.S. 7-1/2 min QUAD (MYTON SE)

JONAH UNIT 1-6-9-17  
(Surface Location) NAD 83  
LATITUDE = 40° 03' 53.98"  
LONGITUDE = 110° 02' 31.89"

**TRI STATE LAND SURVEYING & CONSULTING**  
180 NORTH VERNAL AVE. - VERNAL, UTAH 84078  
(435) 781-2501

|                            |                   |
|----------------------------|-------------------|
| DATE SURVEYED:<br>11-07-06 | SURVEYED BY: D.G. |
| DATE DRAWN:<br>11-14-06    | DRAWN BY: T.C.J.  |
| REVISED:                   | SCALE: 1" = 1000' |

**NEWFIELD PRODUCTION COMPANY  
JONAH FEDERAL #I-6-9-17  
AT SURFACE: NE/NE SECTION 6, T9S, R17E  
DUCHESNE COUNTY, UTAH**

**ONSHORE ORDER NO. 1**

**DRILLING PROGRAM**

**1. GEOLOGIC SURFACE FORMATION:**

Uinta formation of Upper Eocene Age

**2. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:**

|             |            |
|-------------|------------|
| Uinta       | 0' – 2220' |
| Green River | 2220'      |
| Wasatch     | 6180'      |

**3. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS:**

Green River Formation 2220' – 6180' - Oil

**4. PROPOSED CASING PROGRAM**

Please refer to the Monument Butte Field Standard Operation Procedure (SOP).

**5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:**

Please refer to the Monument Butte Field SOP. See Exhibit "C".

**6. TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATION MUDS:**

Please refer to the Monument Butte Field SOP.

**7. AUXILIARY SAFETY EQUIPMENT TO BE USED:**

Please refer to the Monument Butte Field SOP.

**8. TESTING, LOGGING AND CORING PROGRAMS:**

Please refer to the Monument Butte Field SOP.

**9. ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:**

The anticipated maximum bottom hole pressure is 1800 psi. It is not anticipated that abnormal temperatures will be encountered.

**10. ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS:**

Please refer to the Monument Butte Field SOP.

**NEWFIELD PRODUCTION COMPANY  
JONAH FEDERAL #I-6-9-17  
AT SURFACE: NE/NE (LOT #1) SECTION 6, T9S, R17E  
DUCHESNE COUNTY, UTAH**

**ONSHORE ORDER NO. 1**

**MULTI-POINT SURFACE USE & OPERATIONS PLAN**

**1. EXISTING ROADS**

See attached Topographic Map "A"

To reach Newfield Production Company well location site Jonah Federal #I-6-9-17 located in the NE 1/4 NE 1/4 Section 6, T9S, R17E, Duchesne County, Utah:

Proceed southwesterly out of Myton, Utah along Highway 40 - 1.6 miles  $\pm$  to the junction of this highway and UT State Hwy 53; proceed southeasterly along Hwy 53 - 8.9 miles  $\pm$  to it's junction with an existing dirt road to the southwest; proceed southwesterly - 1.0 miles  $\pm$  to the existing Allen Federal 41-6 well location.

**2. PLANNED ACCESS ROAD**

There is no proposed access road for this location. The proposed well will be drilled directionally off of the existing Allen Federal 41-6 well pad. See attached Topographic Map "B".

**3. LOCATION OF EXISTING WELLS**

Refer to Exhibit "B".

**4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES**

The proposed well will be drilled directionally off of the Allen Federal 41-6 well pad. There will be a pumping unit and a short flow line added to the tank battery for the proposed Jonah Federal I-6-9-17. All permanent surface equipment will be painted Carlsbad Canyon.

Please refer to the Monument Butte Field Standard Operating Procedure (SOP).

**5. LOCATION AND TYPE OF WATER SUPPLY**

Please refer to the Monument Butte Field SOP. See Exhibit "A".

**6. SOURCE OF CONSTRUCTION MATERIALS**

The proposed Jonah Federal I-6-9-17 will be drilled off of the existing Allen Federal 41-6 well pad. No additional surface disturbance will be required for this location.

**7. METHODS FOR HANDLING WASTE DISPOSAL**

Please refer to the Monument Butte Field SOP.

**8. ANCILLARY FACILITIES**

Please refer to the Monument Butte Field SOP.

9. **WELL SITE LAYOUT**

See attached Location Layout Diagram.

10. **PLANS FOR RESTORATION OF SURFACE**

Please refer to the Monument Butte Field SOP.

11. **SURFACE OWNERSHIP** - Bureau Of Land Management (Proposed location and access roads leading to).

12. **OTHER ADDITIONAL INFORMATION**

Newfield Production Company requests 30' of disturbed area in Lease UTU-020252A to allow for construction of the proposed water lines. It is proposed that the disturbed area will be 50' wide to allow for construction of a buried 3" steel water injection line and a buried 3" poly water return line. Refer to Topographic Map "C." For a ROW plan of development, please refer to the Monument Butte Field SOP.

**Water Disposal**

Immediately upon first production, all produced water will be confined to a steel storage tank. If the production water meets quality guidelines, it is transported to the Ashley, Monument Butte, Jonah, and Beluga water injection facilities by company or contract trucks. Subsequently, the produced water is injected into approved Class II wells to enhance Newfield's secondary recovery project.

Water not meeting quality criteria, is disposed at Newfield's Pariette #4 disposal well (Sec. 7, T9S R19E) or at State of Utah approved surface disposal facilities.

**Threatened, Endangered, And Other Sensitive Species**

**Mountain Plover:** If new construction or surface disturbing activities are scheduled to occur between May 1 and June 15, detailed surveys of the area within 0.5 mile of the proposed location and within 300 feet of proposed access routes must be conducted to detect the presence of mountain plovers. All surveys must be conducted in accordance with the survey protocols outlined in the most recent USFWS Survey Protocol. Surveys must be completed prior to initiating new construction or surface disturbing activities. No new construction or surface disturbing activities will be allowed between March 15 and August 15 within a 0.5 mile radius of any documented mountain plover nest site.

**Ferruginous Hawk:** Due to this proposed well location's proximity (less than 0.5 mile) to an existing inactive ferruginous hawk nest site, no new construction or surface disturbing activities will be allowed between March 1 and July 31. If the nest remains inactive on May 30<sup>th</sup> (based on a pre-construction survey by a qualified biologist), the operator may construct and drill the location after that date. If the nest site becomes active prior to May 30, no new construction or surface disturbing activities will be allowed within 0.5 mile of the nest until the nest becomes inactive for two full breeding seasons. In the event that this well becomes a producing well, it must be equipped with a multi-cylinder engine or hospital muffler to reduce noise levels.

**Red Tail Hawk:** Due to this proposed well location's proximity (less than 0.5 mile) to an existing inactive red tail hawk nest site, no new construction or surface disturbing activities will be allowed between May 1 and July 15. If the nest remains inactive on May 30<sup>th</sup> (based on a pre-construction survey by a qualified biologist), the operator may construct and drill the location after that date. If the nest site becomes active prior to May 30, no new construction or surface disturbing activities will be allowed within 0.5 mile of the nest until the nest becomes inactive for two full breeding seasons. In the event that this well becomes a producing well, it must be equipped with a multi-cylinder engine or hospital muffler to reduce noise levels.

**Reserve Pit Liner**

A 12 mil liner with felt is required. Please refer to the Monument Butte Field SOP.

**Location and Reserve Pit Reclamation**

Please refer to the Monument Butte Field SOP.

The following seed mixture will be used on the topsoil stockpile, to the recontoured surface of the reserve pit, and for final reclamation: (All poundages are in pure live seed)

|                |                               |            |
|----------------|-------------------------------|------------|
| Shadscale      | <i>Atriplex Centertifolia</i> | 6 lbs/acre |
| Galletta Grass | <i>Hilaria Jamesii</i>        | 6 lbs/acre |

**Details of the On-Site Inspection**

The proposed Jonah Federal #I-6-9-17 was on-sited on 12/8/06. The following were present; Dave Allred (Newfeild Production), Kim Kettle (Newfeild Production), Chuck MacDonald (Bureau of Land Management), and Brandon McDonald (Bureau of Landmanagement). Weather conditions were clear and ground cover was 100% open.

13. **LESSEE'S OR OPERATORS REPRESENTATIVE AND CERTIFICATION**  
**Representative**

Name: Dave Allred  
Address: Route #3 Box 3630  
Myton, UT 84052  
Telephone: (435) 646-3721

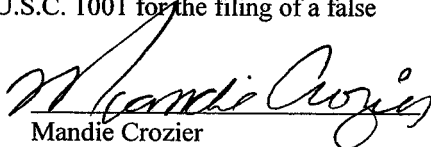
**Certification**

Please be advised that NEWFIELD PRODUCTION COMPANY is considered to be the operator of well #I-6-9-17 Section 6, Township 9S, Range 17E: Lease UTU-020252A Duchesne County, Utah: and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by US Specialty Insurance #B001832.

I hereby certify that the proposed drillsite and access route have been inspected, and I am familiar with the conditions which currently exist; that the statements made in this plan are true and correct to the best of my knowledge; and that the work associated with the operations proposed here will be performed by Newfield Production Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

1/9/07

Date

  
Mandie Crozier  
Regulatory Specialist  
Newfield Production Company



**Scientific Drilling**  
Rocky Mountain Operations

Project: Duchesne County, UT  
Site: Jonah Unit I-6-9-17  
Well: Jonah Unit I-6-9-17  
Wellbore: OH  
Design: Plan #1

**Nowfield Exploration Co.**

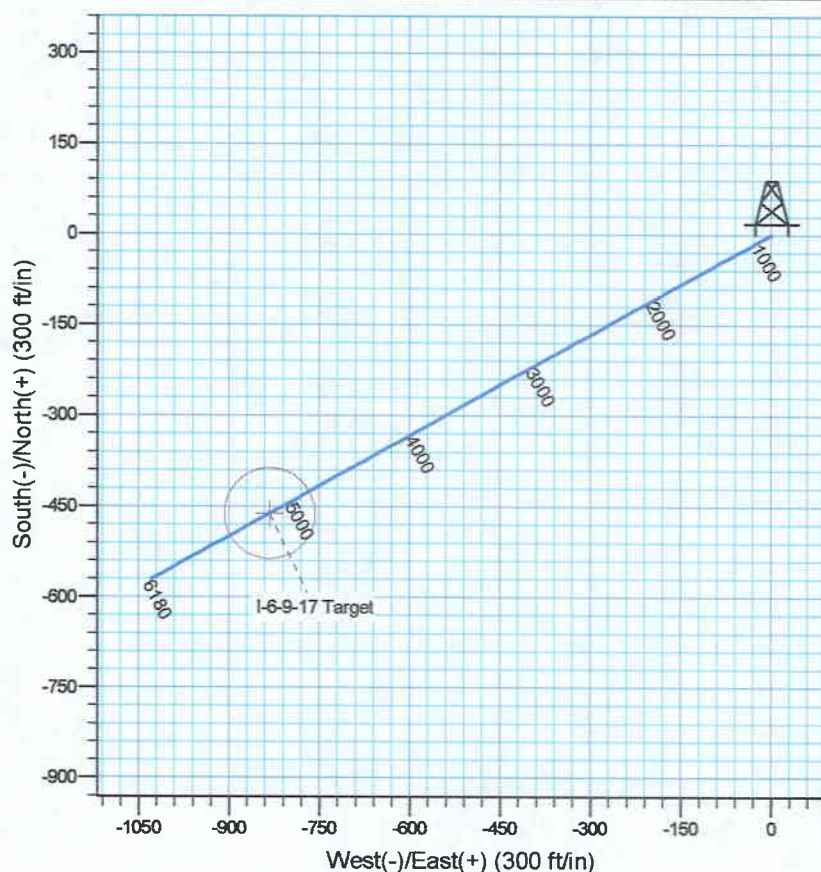
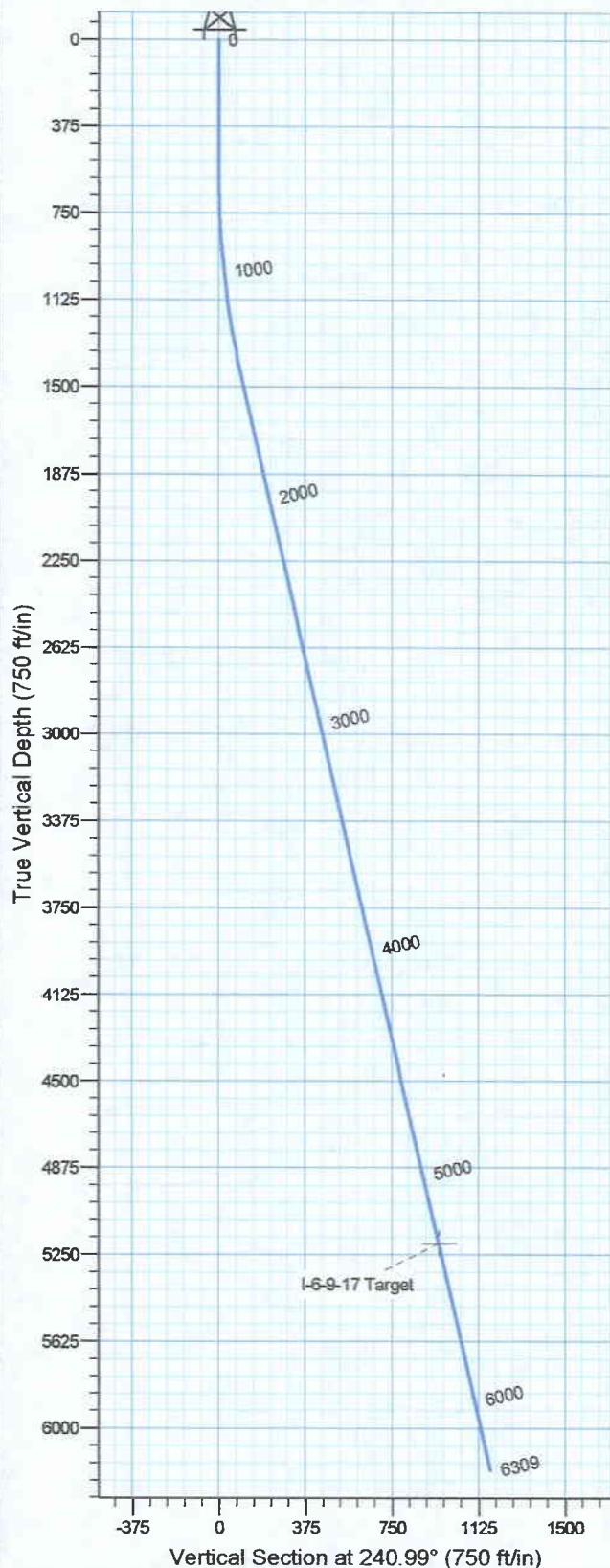


Azimuths to True North  
Magnetic North: 11.87°

Magnetic Field  
Strength: 52749.7nT  
Dip Angle: 65.93°  
Date: 2006-12-15  
Model: IGRF2005-10

WELL DETAILS: Jonah Unit I-6-9-17

GL 5270' & RKB 12' @ 5282.00ft 5270.00  
+N/-S +E/-W Northing Easting Latitude Longitude  
0.00 0.00 7195737.33 2048401.18 40° 3' 53.980 N 110° 2' 31.890 W



#### FORMATION TOP DETAILS

Formation data is available

Plan: Plan #1 (Jonah Unit I-6-9-17/OH)

Created By: Julie Cruse Date: 2006-12-15

PROJECT DETAILS: Duchesne County, UT

Geodetic System: US State Plane 1983  
Datum: North American Datum 1983  
Ellipsoid: GRS 1980  
Zone: Utah Central Zone

System Datum: Mean Sea Level  
Local North: No north reference data is available

#### SECTION DETAILS

| Sec | MD      | Inc   | Azi    | TVD     | +N/-S   | +E/-W    | DLeg | TFace  | VSec    | Target          |
|-----|---------|-------|--------|---------|---------|----------|------|--------|---------|-----------------|
| 1   | 0.00    | 0.00  | 0.00   | 0.00    | 0.00    | 0.00     | 0.00 | 0.00   | 0.00    |                 |
| 2   | 600.00  | 0.00  | 0.00   | 600.00  | 0.00    | 0.00     | 0.00 | 0.00   | 0.00    |                 |
| 3   | 1457.97 | 12.87 | 240.99 | 1450.77 | -46.54  | -83.91   | 1.50 | 240.99 | 95.95   |                 |
| 4   | 303.80  | 12.87 | 240.99 | 5200.00 | -462.00 | -833.00  | 0.00 | 0.00   | 952.54  | I-6-9-17 Target |
| 5   | 309.06  | 12.87 | 240.99 | 6180.00 | -570.60 | -1028.80 | 0.00 | 0.00   | 1176.44 |                 |

# **Newfield Exploration Co.**

**Duchesne County, UT**

**Jonah Unit I-6-9-17**

**Jonah Unit I-6-9-17**

**OH**

**Plan: Plan #1**

## **Standard Planning Report**

**15 December, 2006**



# Scientific Drilling Planning Report

**Database:** EDM 2003.14.1.0 Single User Db  
**Company:** Newfield Exploration Co.  
**Project:** Duchesne County, UT  
**Site:** Jonah Unit I-6-9-17  
**Well:** Jonah Unit I-6-9-17  
**Wellbore:** OH  
**Design:** Plan #1

**Local Co-ordinate Reference:** Well Jonah Unit I-6-9-17  
**TVD Reference:** GL 5270' & RKB 12' @ 5282.00ft  
**MD Reference:** GL 5270' & RKB 12' @ 5282.00ft  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature

|                    |                           |                      |                |
|--------------------|---------------------------|----------------------|----------------|
| <b>Project</b>     | Duchesne County, UT       |                      |                |
| <b>Map System:</b> | US State Plane 1983       | <b>System Datum:</b> | Mean Sea Level |
| <b>Geo Datum:</b>  | North American Datum 1983 |                      |                |
| <b>Map Zone:</b>   | Utah Central Zone         |                      |                |

|                              |                                     |                          |                  |
|------------------------------|-------------------------------------|--------------------------|------------------|
| <b>Site</b>                  | Jonah Unit I-6-9-17, Sec 6 T9S R17E |                          |                  |
| <b>Site Position:</b>        |                                     | <b>Northing:</b>         | 7,195,737.34 ft  |
| <b>From:</b>                 | Lat/Long                            | <b>Easting:</b>          | 2,048,401.18 ft  |
| <b>Position Uncertainty:</b> | 0.00 ft                             | <b>Slot Radius:</b>      | in               |
|                              |                                     | <b>Latitude:</b>         | 40° 3' 53.980 N  |
|                              |                                     | <b>Longitude:</b>        | 110° 2' 31.890 W |
|                              |                                     | <b>Grid Convergence:</b> | 0.93 °           |

|                             |   |                            |                                  |
|-----------------------------|---|----------------------------|----------------------------------|
| <b>Well</b>                 | Jonah Unit I-6-9-17, 778' FNL, 627' FEL |                            |                                  |
| <b>Well Position</b>        | +N-S                                    | 0.00 ft                    | <b>Northing:</b> 7,195,737.33 ft |
|                             | +E-W                                    | 0.00 ft                    | <b>Easting:</b> 2,048,401.18 ft  |
| <b>Position Uncertainty</b> | 0.00 ft                                 | <b>Wellhead Elevation:</b> | ft                               |
|                             |   | <b>Latitude:</b>           | 40° 3' 53.980 N                  |
|                             |   | <b>Longitude:</b>          | 110° 2' 31.890 W                 |
|                             |   | <b>Ground Level:</b>       | 5,270.00 ft                      |

|                  |                   |                    |                    |                  |                       |
|------------------|-------------------|--------------------|--------------------|------------------|-----------------------|
| <b>Wellbore</b>  | OH                |                    |                    |                  |                       |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination</b> | <b>Dip Angle</b> | <b>Field Strength</b> |
|                  |                   |                    | (°)                | (°)              | (nT)                  |
|                  | IGRF2005-10       | 2006-12-15         | 11.87              | 65.93            | 52,750                |

|                          |                         |             |                      |                  |
|--------------------------|-------------------------|-------------|----------------------|------------------|
| <b>Design</b>            | Plan #1                 |             |                      |                  |
| <b>Audit Notes:</b>      |                         |             |                      |                  |
| <b>Version:</b>          | <b>Phase:</b>           | PLAN        | <b>Tie On Depth:</b> | 0.00             |
| <b>Vertical Section:</b> | <b>Depth From (TVD)</b> | <b>+N-S</b> | <b>+E-W</b>          | <b>Direction</b> |
|                          | (ft)                    | (ft)        | (ft)                 | (°)              |
|                          | 0.00                    | 0.00        | 0.00                 | 240.99           |

| Plan Sections       |                 |             |                     |           |           |                       |                      |                     |         |                 |
|---------------------|-----------------|-------------|---------------------|-----------|-----------|-----------------------|----------------------|---------------------|---------|-----------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N-S (ft) | +E-W (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | TPO (°) | Target          |
| 0.00                | 0.00            | 0.00        | 0.00                | 0.00      | 0.00      | 0.00                  | 0.00                 | 0.00                | 0.00    |                 |
| 600.00              | 0.00            | 0.00        | 600.00              | 0.00      | 0.00      | 0.00                  | 0.00                 | 0.00                | 0.00    |                 |
| 1,457.97            | 12.87           | 240.99      | 1,450.77            | -46.54    | -83.91    | 1.50                  | 1.50                 | 0.00                | 240.99  |                 |
| 5,303.80            | 12.87           | 240.99      | 5,200.00            | -462.00   | -833.00   | 0.00                  | 0.00                 | 0.00                | 0.00    | I-6-9-17 Target |
| 6,309.06            | 12.87           | 240.99      | 6,180.00            | -570.60   | -1,028.80 | 0.00                  | 0.00                 | 0.00                | 0.00    |                 |

# Scientific Drilling Planning Report

**Database:** EDM 2003.14.1.0 Single User Db  
**Company:** Newfield Exploration Co.  
**Project:** Duchesne County, UT  
**Site:** Jonah Unit I-6-9-17  
**Well:** Jonah Unit I-6-9-17  
**Wellbore:** OH  
**Design:** Plan #1

**Local Co-ordinate Reference:** Well Jonah Unit I-6-9-17  
**TVD Reference:** GL 5270' & RKB 12' @ 5282.00ft  
**MD Reference:** GL 5270' & RKB 12' @ 5282.00ft  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature

## Planned Survey

| Measured<br>Depth<br>(ft) | Inclination<br>(°) | Azimuth<br>(°) | Vertical<br>Depth<br>(ft) | +N/-S<br>(ft) | +E/-W<br>(ft) | Vertical<br>Section<br>(ft) | Dogleg<br>Rate<br>(°/100ft) | Build<br>Rate<br>(°/100ft) | Turn<br>Rate<br>(°/100ft) |
|---------------------------|--------------------|----------------|---------------------------|---------------|---------------|-----------------------------|-----------------------------|----------------------------|---------------------------|
| 0.00                      | 0.00               | 0.00           | 0.00                      | 0.00          | 0.00          | 0.00                        | 0.00                        | 0.00                       | 0.00                      |
| 100.00                    | 0.00               | 0.00           | 100.00                    | 0.00          | 0.00          | 0.00                        | 0.00                        | 0.00                       | 0.00                      |
| 200.00                    | 0.00               | 0.00           | 200.00                    | 0.00          | 0.00          | 0.00                        | 0.00                        | 0.00                       | 0.00                      |
| 300.00                    | 0.00               | 0.00           | 300.00                    | 0.00          | 0.00          | 0.00                        | 0.00                        | 0.00                       | 0.00                      |
| 400.00                    | 0.00               | 0.00           | 400.00                    | 0.00          | 0.00          | 0.00                        | 0.00                        | 0.00                       | 0.00                      |
| 500.00                    | 0.00               | 0.00           | 500.00                    | 0.00          | 0.00          | 0.00                        | 0.00                        | 0.00                       | 0.00                      |
| 600.00                    | 0.00               | 0.00           | 600.00                    | 0.00          | 0.00          | 0.00                        | 0.00                        | 0.00                       | 0.00                      |
| 700.00                    | 1.50               | 240.99         | 699.99                    | -0.63         | -1.14         | 1.31                        | 1.50                        | 1.50                       | 0.00                      |
| 800.00                    | 3.00               | 240.99         | 799.91                    | -2.54         | -4.58         | 5.23                        | 1.50                        | 1.50                       | 0.00                      |
| 900.00                    | 4.50               | 240.99         | 899.69                    | -5.71         | -10.30        | 11.77                       | 1.50                        | 1.50                       | 0.00                      |
| 1,000.00                  | 6.00               | 240.99         | 999.27                    | -10.15        | -18.30        | 20.92                       | 1.50                        | 1.50                       | 0.00                      |
| 1,100.00                  | 7.50               | 240.99         | 1,098.57                  | -15.85        | -28.58        | 32.68                       | 1.50                        | 1.50                       | 0.00                      |
| 1,200.00                  | 9.00               | 240.99         | 1,197.54                  | -22.81        | -41.13        | 47.03                       | 1.50                        | 1.50                       | 0.00                      |
| 1,300.00                  | 10.50              | 240.99         | 1,296.09                  | -31.02        | -55.93        | 63.96                       | 1.50                        | 1.50                       | 0.00                      |
| 1,400.00                  | 12.00              | 240.99         | 1,394.16                  | -40.48        | -72.99        | 83.47                       | 1.50                        | 1.50                       | 0.00                      |
| 1,457.97                  | 12.87              | 240.99         | 1,450.77                  | -46.54        | -83.91        | 95.95                       | 1.50                        | 1.50                       | 0.00                      |
| 1,500.00                  | 12.87              | 240.99         | 1,491.75                  | -51.08        | -92.10        | 105.31                      | 0.00                        | 0.00                       | 0.00                      |
| 1,600.00                  | 12.87              | 240.99         | 1,589.24                  | -61.88        | -111.58       | 127.59                      | 0.00                        | 0.00                       | 0.00                      |
| 1,700.00                  | 12.87              | 240.99         | 1,686.72                  | -72.68        | -131.05       | 149.86                      | 0.00                        | 0.00                       | 0.00                      |
| 1,800.00                  | 12.87              | 240.99         | 1,784.21                  | -83.49        | -150.53       | 172.13                      | 0.00                        | 0.00                       | 0.00                      |
| 1,900.00                  | 12.87              | 240.99         | 1,881.70                  | -94.29        | -170.01       | 194.41                      | 0.00                        | 0.00                       | 0.00                      |
| 2,000.00                  | 12.87              | 240.99         | 1,979.19                  | -105.09       | -189.49       | 216.68                      | 0.00                        | 0.00                       | 0.00                      |
| 2,100.00                  | 12.87              | 240.99         | 2,076.68                  | -115.90       | -208.96       | 238.95                      | 0.00                        | 0.00                       | 0.00                      |
| 2,200.00                  | 12.87              | 240.99         | 2,174.16                  | -126.70       | -228.44       | 261.23                      | 0.00                        | 0.00                       | 0.00                      |
| 2,300.00                  | 12.87              | 240.99         | 2,271.65                  | -137.50       | -247.92       | 283.50                      | 0.00                        | 0.00                       | 0.00                      |
| 2,400.00                  | 12.87              | 240.99         | 2,369.14                  | -148.31       | -267.40       | 305.77                      | 0.00                        | 0.00                       | 0.00                      |
| 2,500.00                  | 12.87              | 240.99         | 2,466.63                  | -159.11       | -286.88       | 328.05                      | 0.00                        | 0.00                       | 0.00                      |
| 2,600.00                  | 12.87              | 240.99         | 2,564.12                  | -169.91       | -306.35       | 350.32                      | 0.00                        | 0.00                       | 0.00                      |
| 2,700.00                  | 12.87              | 240.99         | 2,661.60                  | -180.71       | -325.83       | 372.59                      | 0.00                        | 0.00                       | 0.00                      |
| 2,800.00                  | 12.87              | 240.99         | 2,759.09                  | -191.52       | -345.31       | 394.86                      | 0.00                        | 0.00                       | 0.00                      |
| 2,900.00                  | 12.87              | 240.99         | 2,856.58                  | -202.32       | -364.79       | 417.14                      | 0.00                        | 0.00                       | 0.00                      |
| 3,000.00                  | 12.87              | 240.99         | 2,954.07                  | -213.12       | -384.27       | 439.41                      | 0.00                        | 0.00                       | 0.00                      |
| 3,100.00                  | 12.87              | 240.99         | 3,051.56                  | -223.93       | -403.74       | 461.68                      | 0.00                        | 0.00                       | 0.00                      |
| 3,200.00                  | 12.87              | 240.99         | 3,149.04                  | -234.73       | -423.22       | 483.96                      | 0.00                        | 0.00                       | 0.00                      |
| 3,300.00                  | 12.87              | 240.99         | 3,246.53                  | -245.53       | -442.70       | 506.23                      | 0.00                        | 0.00                       | 0.00                      |
| 3,400.00                  | 12.87              | 240.99         | 3,344.02                  | -256.33       | -462.18       | 528.50                      | 0.00                        | 0.00                       | 0.00                      |
| 3,500.00                  | 12.87              | 240.99         | 3,441.51                  | -267.14       | -481.66       | 550.78                      | 0.00                        | 0.00                       | 0.00                      |
| 3,600.00                  | 12.87              | 240.99         | 3,539.00                  | -277.94       | -501.13       | 573.05                      | 0.00                        | 0.00                       | 0.00                      |
| 3,700.00                  | 12.87              | 240.99         | 3,636.48                  | -288.74       | -520.61       | 595.32                      | 0.00                        | 0.00                       | 0.00                      |
| 3,800.00                  | 12.87              | 240.99         | 3,733.97                  | -299.55       | -540.09       | 617.60                      | 0.00                        | 0.00                       | 0.00                      |
| 3,900.00                  | 12.87              | 240.99         | 3,831.46                  | -310.35       | -559.57       | 639.87                      | 0.00                        | 0.00                       | 0.00                      |
| 4,000.00                  | 12.87              | 240.99         | 3,928.95                  | -321.15       | -579.05       | 662.14                      | 0.00                        | 0.00                       | 0.00                      |
| 4,100.00                  | 12.87              | 240.99         | 4,026.44                  | -331.95       | -598.52       | 684.42                      | 0.00                        | 0.00                       | 0.00                      |
| 4,200.00                  | 12.87              | 240.99         | 4,123.92                  | -342.76       | -618.00       | 706.69                      | 0.00                        | 0.00                       | 0.00                      |
| 4,300.00                  | 12.87              | 240.99         | 4,221.41                  | -353.56       | -637.48       | 728.96                      | 0.00                        | 0.00                       | 0.00                      |
| 4,400.00                  | 12.87              | 240.99         | 4,318.90                  | -364.36       | -656.96       | 751.23                      | 0.00                        | 0.00                       | 0.00                      |
| 4,500.00                  | 12.87              | 240.99         | 4,416.39                  | -375.17       | -676.44       | 773.51                      | 0.00                        | 0.00                       | 0.00                      |
| 4,600.00                  | 12.87              | 240.99         | 4,513.88                  | -385.97       | -695.91       | 795.78                      | 0.00                        | 0.00                       | 0.00                      |
| 4,700.00                  | 12.87              | 240.99         | 4,611.36                  | -396.77       | -715.39       | 818.05                      | 0.00                        | 0.00                       | 0.00                      |
| 4,800.00                  | 12.87              | 240.99         | 4,708.85                  | -407.57       | -734.87       | 840.33                      | 0.00                        | 0.00                       | 0.00                      |
| 4,900.00                  | 12.87              | 240.99         | 4,806.34                  | -418.38       | -754.35       | 862.60                      | 0.00                        | 0.00                       | 0.00                      |
| 5,000.00                  | 12.87              | 240.99         | 4,903.83                  | -429.18       | -773.83       | 884.87                      | 0.00                        | 0.00                       | 0.00                      |
| 5,100.00                  | 12.87              | 240.99         | 5,001.32                  | -439.98       | -793.30       | 907.15                      | 0.00                        | 0.00                       | 0.00                      |
| 5,200.00                  | 12.87              | 240.99         | 5,098.80                  | -450.79       | -812.78       | 929.42                      | 0.00                        | 0.00                       | 0.00                      |

# Scientific Drilling Planning Report

**Database:** EDM 2003.14.1.0 Single User Db  
**Company:** Newfield Exploration Co.  
**Project:** Duchesne County, UT  
**Site:** Jonah Unit I-6-9-17  
**Well:** Jonah Unit I-6-9-17  
**Wellbore:** OH  
**Design:** Plan #1

**Local Co-ordinate Reference:** Well Jonah Unit I-6-9-17  
**TVD Reference:** GL 5270' & RKB 12' @ 5282.00ft  
**MD Reference:** GL 5270' & RKB 12' @ 5282.00ft  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature

## Planned Survey

| Measured Depth (ft)    | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N-S (ft) | +E-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|------------------------|-----------------|-------------|---------------------|-----------|-----------|-----------------------|-----------------------|----------------------|---------------------|
| 5,300.00               | 12.87           | 240.99      | 5,196.29            | -461.59   | -832.26   | 951.69                | 0.00                  | 0.00                 | 0.00                |
| 5,303.80               | 12.87           | 240.99      | 5,200.00            | -462.00   | -833.00   | 952.54                | 0.00                  | 0.00                 | 0.00                |
| <b>I-6-9-17 Target</b> |                 |             |                     |           |           |                       |                       |                      |                     |
| 5,400.00               | 12.87           | 240.99      | 5,293.78            | -472.39   | -851.74   | 973.97                | 0.00                  | 0.00                 | 0.00                |
| 5,500.00               | 12.87           | 240.99      | 5,391.27            | -483.19   | -871.21   | 996.24                | 0.00                  | 0.00                 | 0.00                |
| 5,600.00               | 12.87           | 240.99      | 5,488.76            | -494.00   | -890.69   | 1,018.51              | 0.00                  | 0.00                 | 0.00                |
| 5,700.00               | 12.87           | 240.99      | 5,586.24            | -504.80   | -910.17   | 1,040.79              | 0.00                  | 0.00                 | 0.00                |
| 5,800.00               | 12.87           | 240.99      | 5,683.73            | -515.60   | -929.65   | 1,063.06              | 0.00                  | 0.00                 | 0.00                |
| 5,900.00               | 12.87           | 240.99      | 5,781.22            | -526.41   | -949.13   | 1,085.33              | 0.00                  | 0.00                 | 0.00                |
| 6,000.00               | 12.87           | 240.99      | 5,878.71            | -537.21   | -968.60   | 1,107.60              | 0.00                  | 0.00                 | 0.00                |
| 6,100.00               | 12.87           | 240.99      | 5,976.20            | -548.01   | -988.08   | 1,129.88              | 0.00                  | 0.00                 | 0.00                |
| 6,200.00               | 12.87           | 240.99      | 6,073.68            | -558.82   | -1,007.56 | 1,152.15              | 0.00                  | 0.00                 | 0.00                |
| 6,300.00               | 12.87           | 240.99      | 6,171.17            | -569.62   | -1,027.04 | 1,174.42              | 0.00                  | 0.00                 | 0.00                |
| 6,309.06               | 12.87           | 240.99      | 6,180.00            | -570.60   | -1,028.80 | 1,176.44              | 0.00                  | 0.00                 | 0.00                |

## Targets

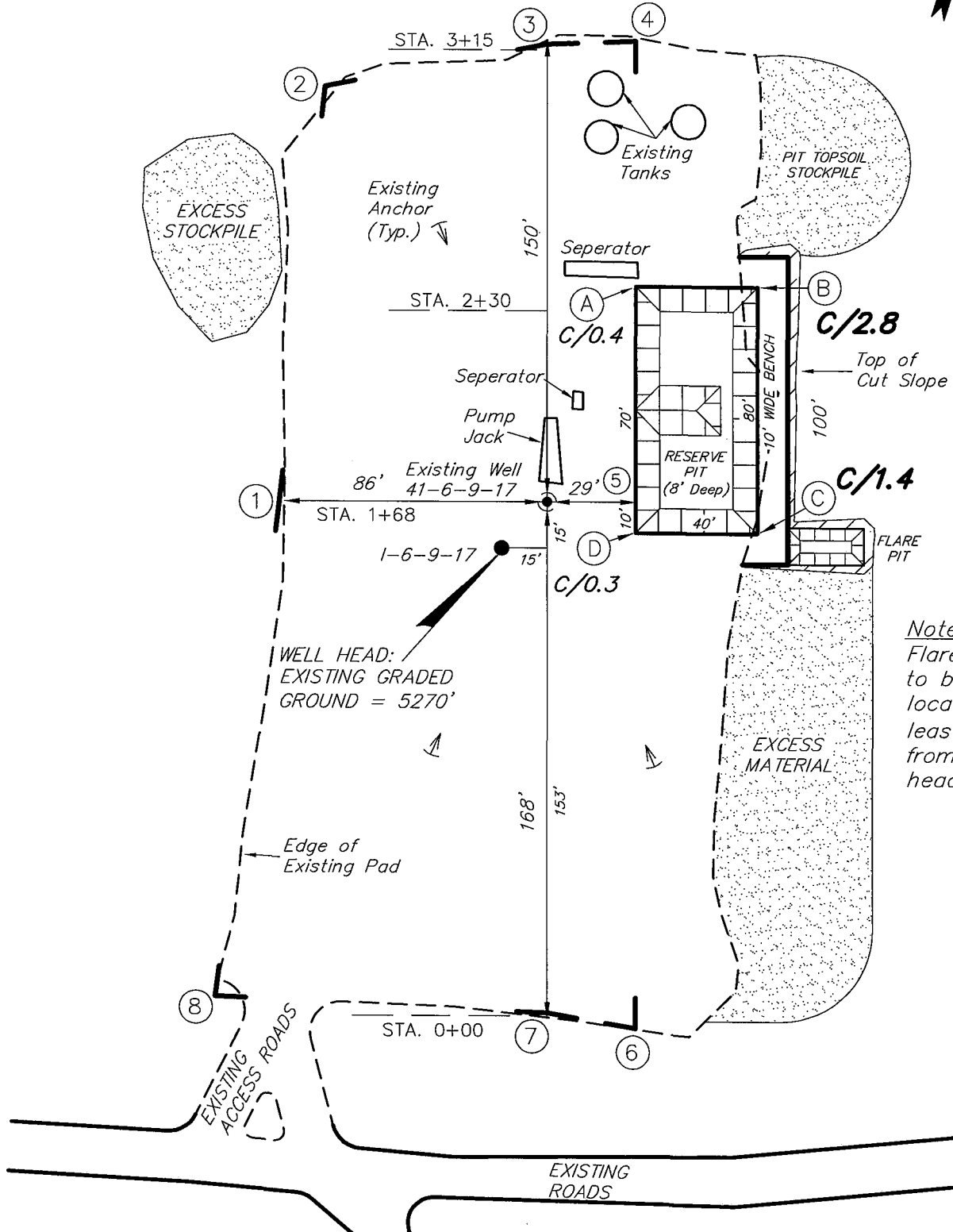
| Target Name              | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N-S (ft) | +E-W (ft) | Northing (ft) | Easting (ft) | Latitude        | Longitude        |
|--------------------------|---------------|--------------|----------|-----------|-----------|---------------|--------------|-----------------|------------------|
| <b>- hit/miss target</b> |               |              |          |           |           |               |              |                 |                  |
| <b>- Shape</b>           |               |              |          |           |           |               |              |                 |                  |
| I-6-9-17 Target          | 0.00          | 0.00         | 5,200.00 | -462.00   | -833.00   | 7,195,261.82  | 2,047,575.82 | 40° 3' 49.414 N | 110° 2' 42.605 W |
| - plan hits target       |               |              |          |           |           |               |              |                 |                  |
| - Circle (radius 75.00)  |               |              |          |           |           |               |              |                 |                  |

# NEWFIELD PRODUCTION COMPANY

JONAH UNIT 1-6-9-17 (Proposed Well)

JONAH UNIT 41-6-9-17 (Existing Well)

Pad Location: NENE Section 6, T9S, R17E, S.L.B.&M.



Note:  
Flare pit is to be located at least 80' from well head.

SURVEYED BY: D.G.

SCALE: 1" = 50'

DRAWN BY: T.C.J.

DATE: 11-14-06

**Tri State**  
Land Surveying, Inc.

(435) 781-2501

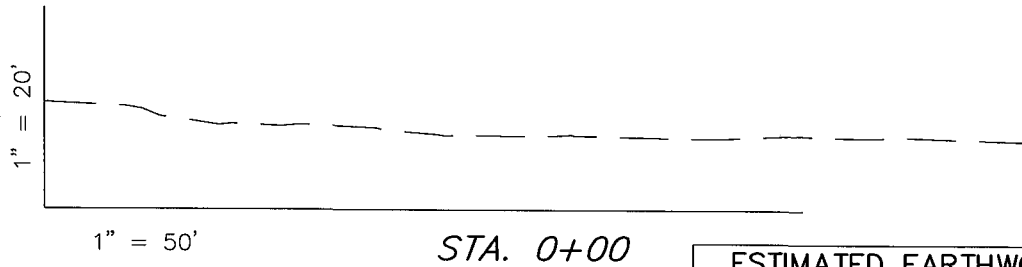
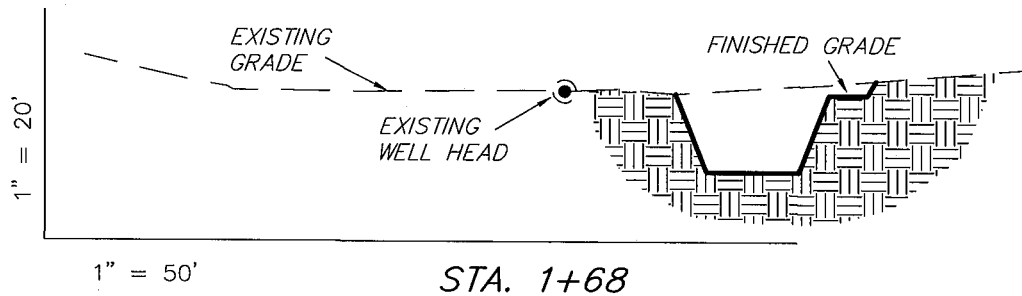
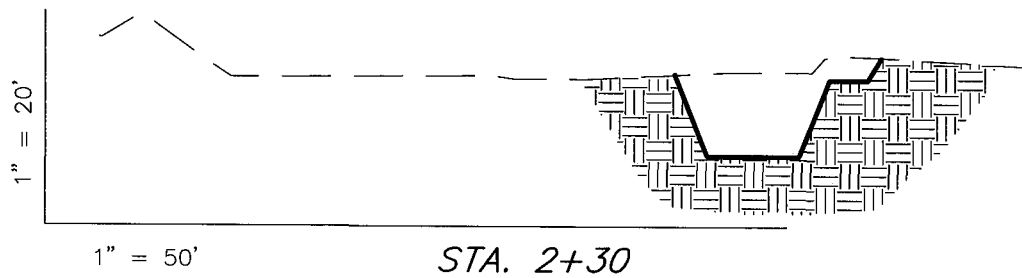
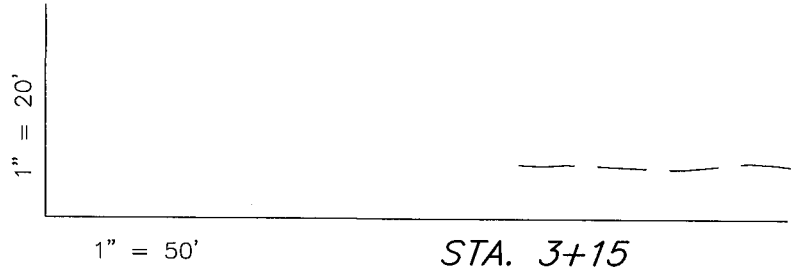
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

# NEWFIELD PRODUCTION COMPANY

## CROSS SECTIONS

JONAH UNIT I-6-9-17 (Proposed Well)

JONAH UNIT 41-6-9-17 (Existing Well)



NOTE:  
UNLESS OTHERWISE NOTED  
CUT & FILL SLOPES ARE AT  
1.5:1

### ESTIMATED EARTHWORK QUANTITIES (No Shrink or swell adjustments have been used) (Expressed in Cubic Yards)

| ITEM   | CUT | FILL | 6" TOPSOIL                               | EXCESS |
|--------|-----|------|--|--------|
| PAD    | 110 | 10   | Topsoil is<br>not included<br>in Pad Cut | 100    |
| PIT    | 640 | 0    |  | 640    |
| TOTALS | 750 | 10   | 130                                      | 740    |

SURVEYED BY: D.G.

SCALE: 1" = 50'

DRAWN BY: T.C.J.

DATE: 11-14-06

**Tri State**  
Land Surveying, Inc.

(435) 781-2501

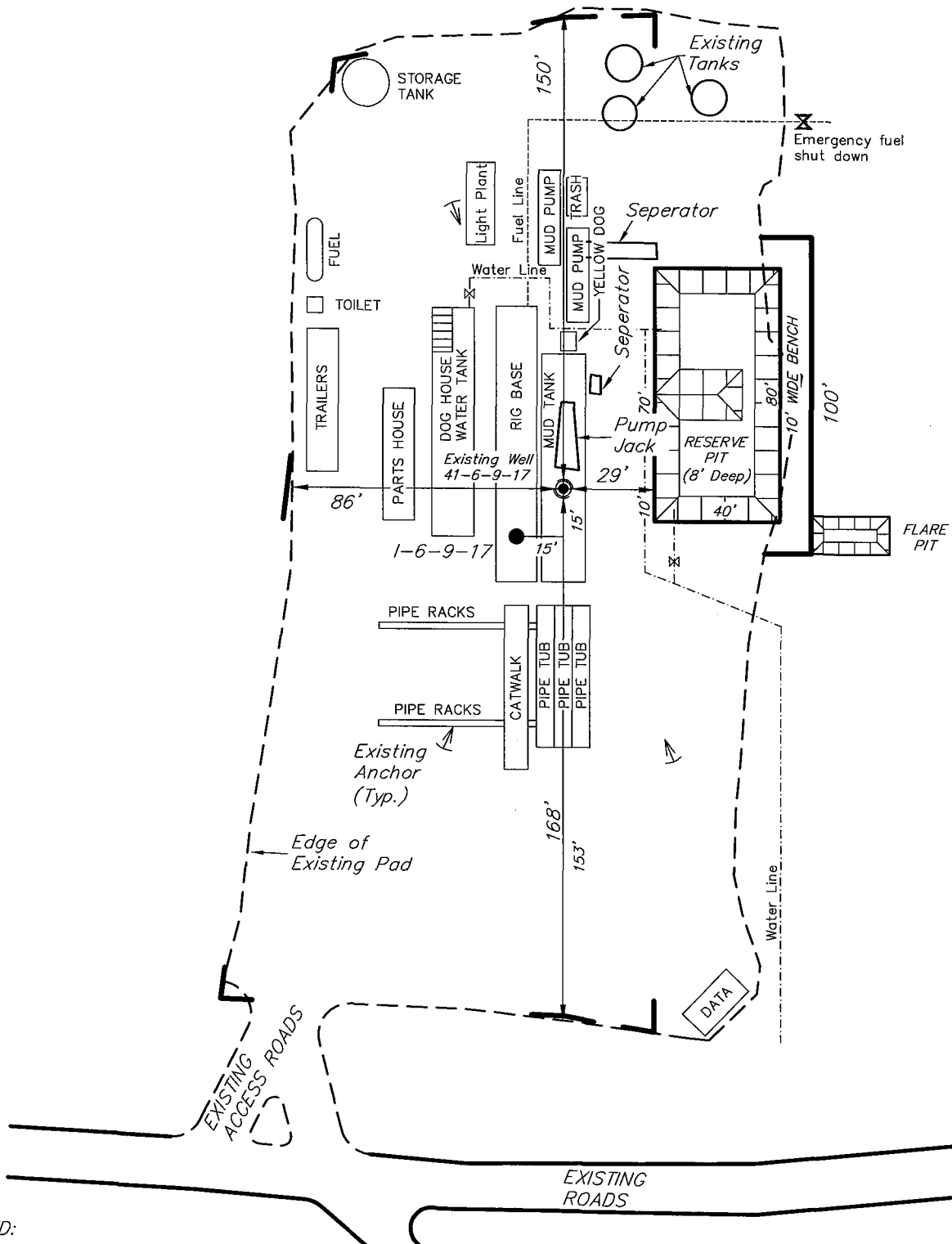
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

# NEWFIELD PRODUCTION COMPANY

## TYPICAL RIG LAYOUT

JONAH UNIT 1-6-9-17 (Proposed Well)

JONAH UNIT 41-6-9-17 (Existing Well)



REVISED:

SURVEYED BY: D.G.

SCALE: 1" = 50'

DRAWN BY: T.C.J.

DATE: 11-14-06

**Tri State**  
Land Surveying, Inc.

(435) 781-2501

180 NORTH VERNAL AVE. VERNAL, UTAH 84078

# Newfield Production Company Proposed Site Facility Diagram

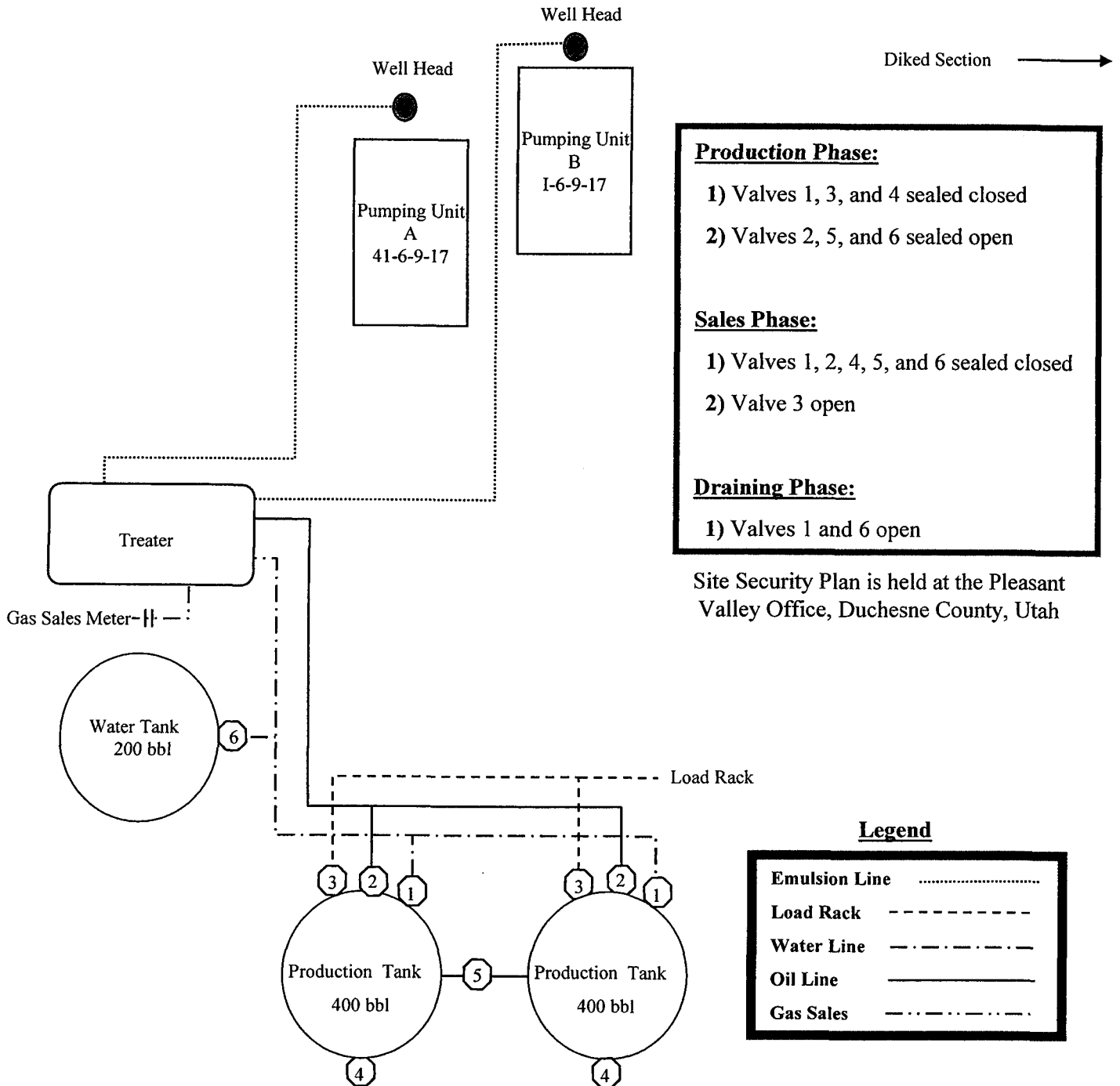
Jonah Federal I-6-9-17

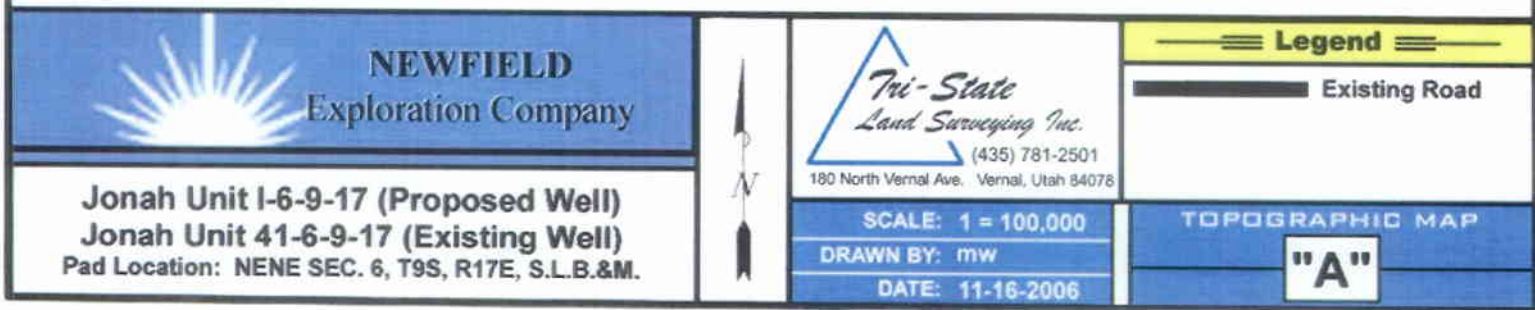
From the existing 41-6-9-17 Location

NE/NE Sec. 6 T9S, 17E

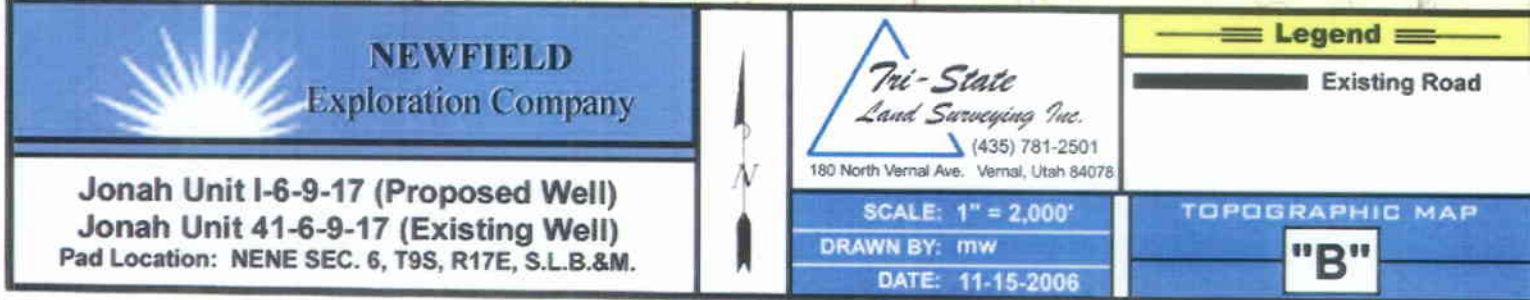
Duchesne County, Utah

UTU-020252A











**Existing Gas Pipeline**



**NEWFIELD**  
Exploration Company

**Jonah Unit I-6-9-17 (Proposed Well)**  
**Jonah Unit 41-6-9-17 (Existing Well)**  
**Pad Location: NENE SEC. 6, T9S, R17E, S.L.B.&M.**



180 North Vernal Ave. Vernal, Utah 84078

SCALE: 1" = 2,000'

DRAWN BY: MW

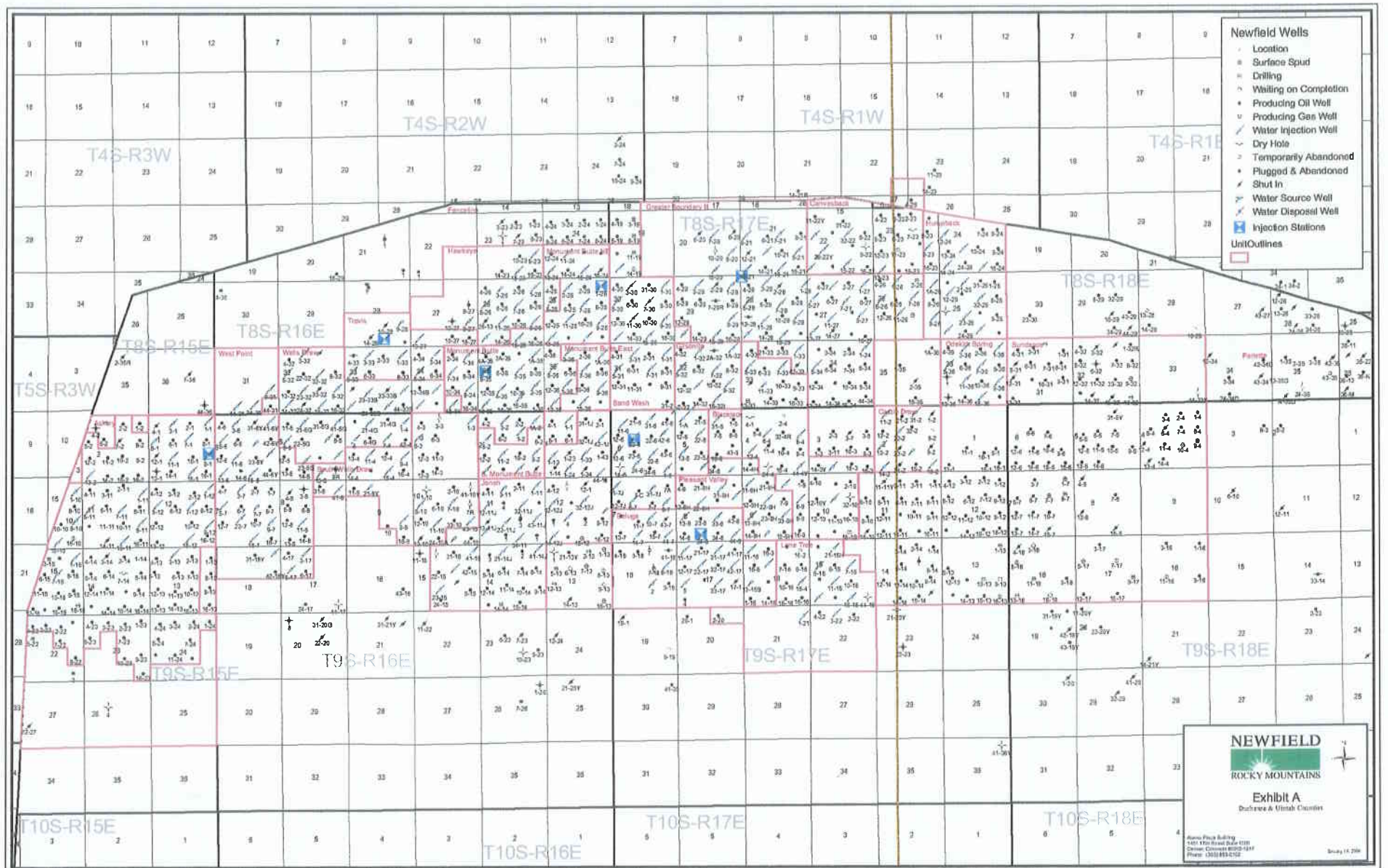
DATE: 11-16-2006

Legend

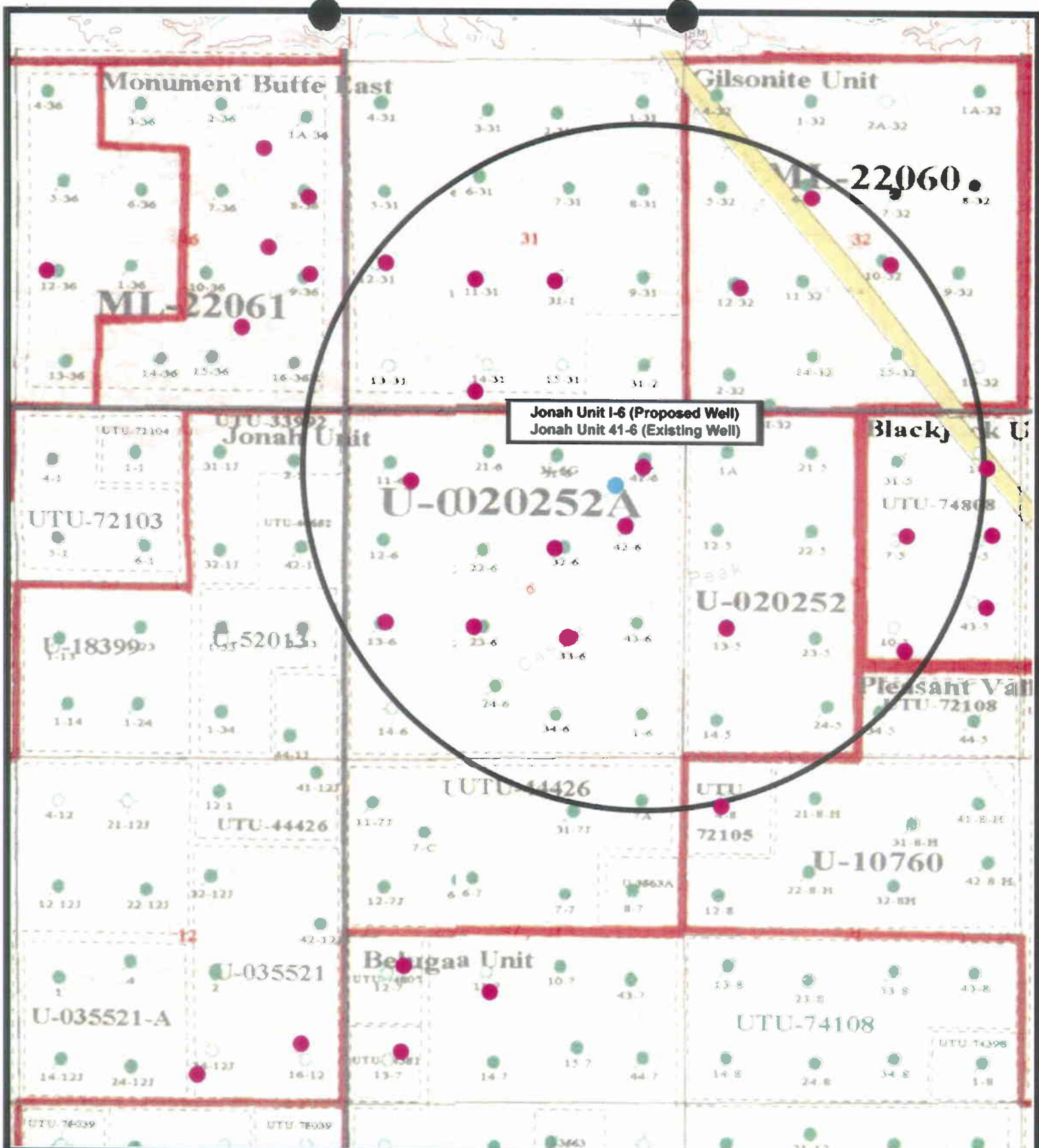
 Roads  
 Proposed Water Line




TOPOGRAPHIC MAP

"C"







|  |   |   |  |
|--|---|---|--|
|  <p><b>NEWFIELD</b><br/>Exploration Company</p> <p><b>Jonah Unit I-6-9-17 (Proposed Well)</b><br/> <b>Jonah Unit 41-6-9-17 (Existing Well)</b><br/>         Pad Location: NENE SEC. 6, T9S, R17E, S.L.B.&amp;M.</p> |  |  <p><b>Tri-State</b><br/>Land Surveying Inc.<br/>(435) 781-2501<br/>180 North Vernal Ave. Vernal, Utah 84076</p> <p>SCALE: 1" = 2,000'<br/>         DRAWN BY: mw<br/>         DATE: 11-16-2006</p> | <p><b>Legend</b></p> <ul style="list-style-type: none"> <li>● Pad Location</li> <li>● Bottom Hole Location</li> <li>○ One-Mile Radius</li> </ul> <p><b>Exhibit "B"</b></p> |
|--|---|---|--|

# 2-M SYSTEM

Blowout Prevention Equipment Systems

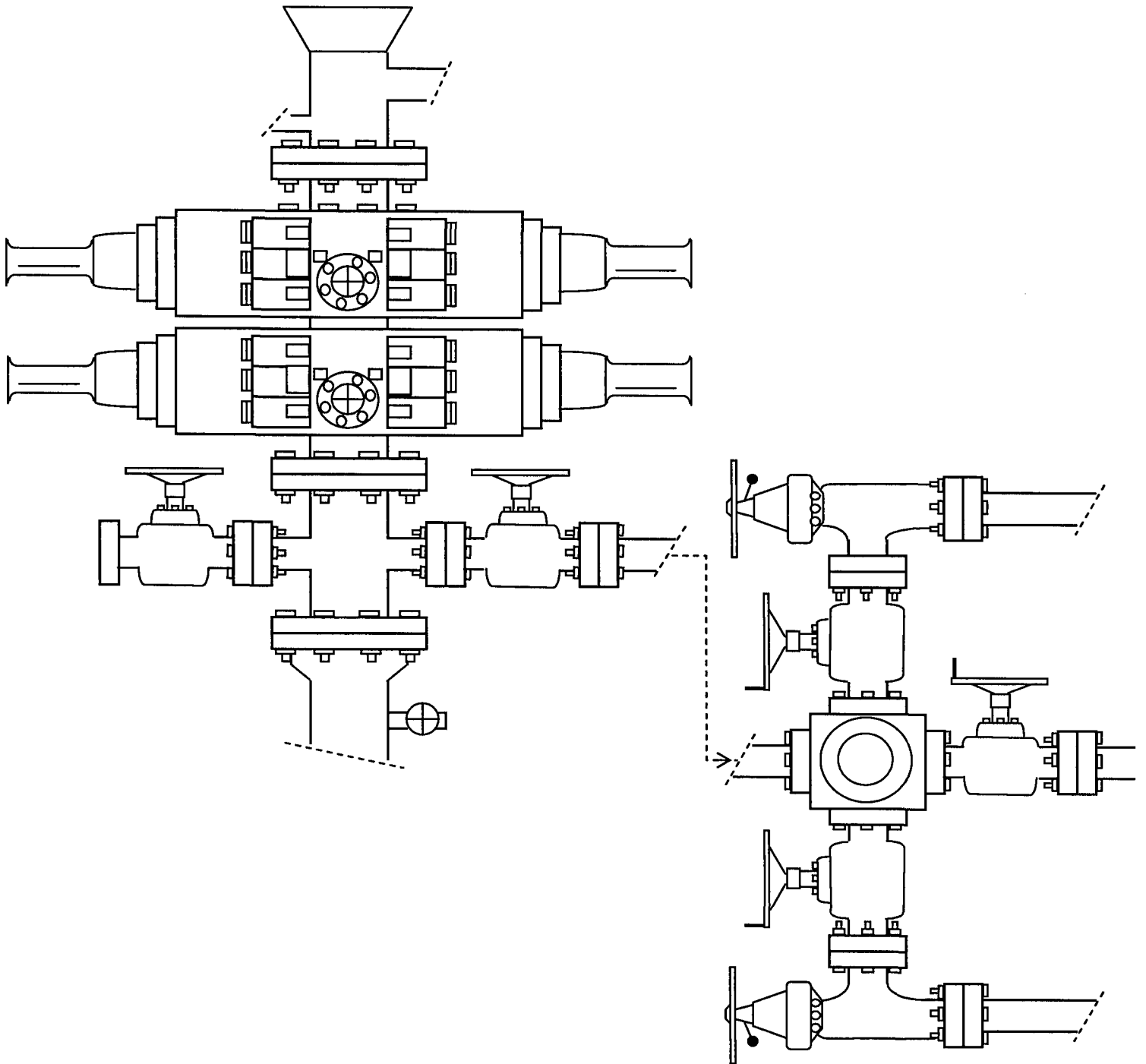


EXHIBIT C

**WORKSHEET**  
**APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 01/16/2007

API NO. ASSIGNED: 43-013-33495

WELL NAME: JONAH FED I-6-9-17

OPERATOR: NEWFIELD PRODUCTION ( N2695 )

CONTACT: MANDIE CROZIER

PHONE NUMBER: 435-646-3721

PROPOSED LOCATION:

*T NENE* 06 090S 170E  
*B SW/NE*  
SURFACE: 0778 FNL 0627 FEL  
BOTTOM: 1319 FNL 1311 FEL  
COUNTY: DUCHESNE  
LATITUDE: 40.06501 LONGITUDE: -110.0413  
UTM SURF EASTINGS: 581759 NORTHINGS: 4435203  
FIELD NAME: MONUMENT BUTTE ( 105 )

|                        |          |      |
|------------------------|----------|------|
| INSPECT LOCATN BY: / / |          |      |
| Tech Review            | Initials | Date |
| Engineering            |          |      |
| Geology                |          |      |
| Surface                |          |      |

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-020252A

SURFACE OWNER: 1 - Federal

PROPOSED FORMATION: GRRV

COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

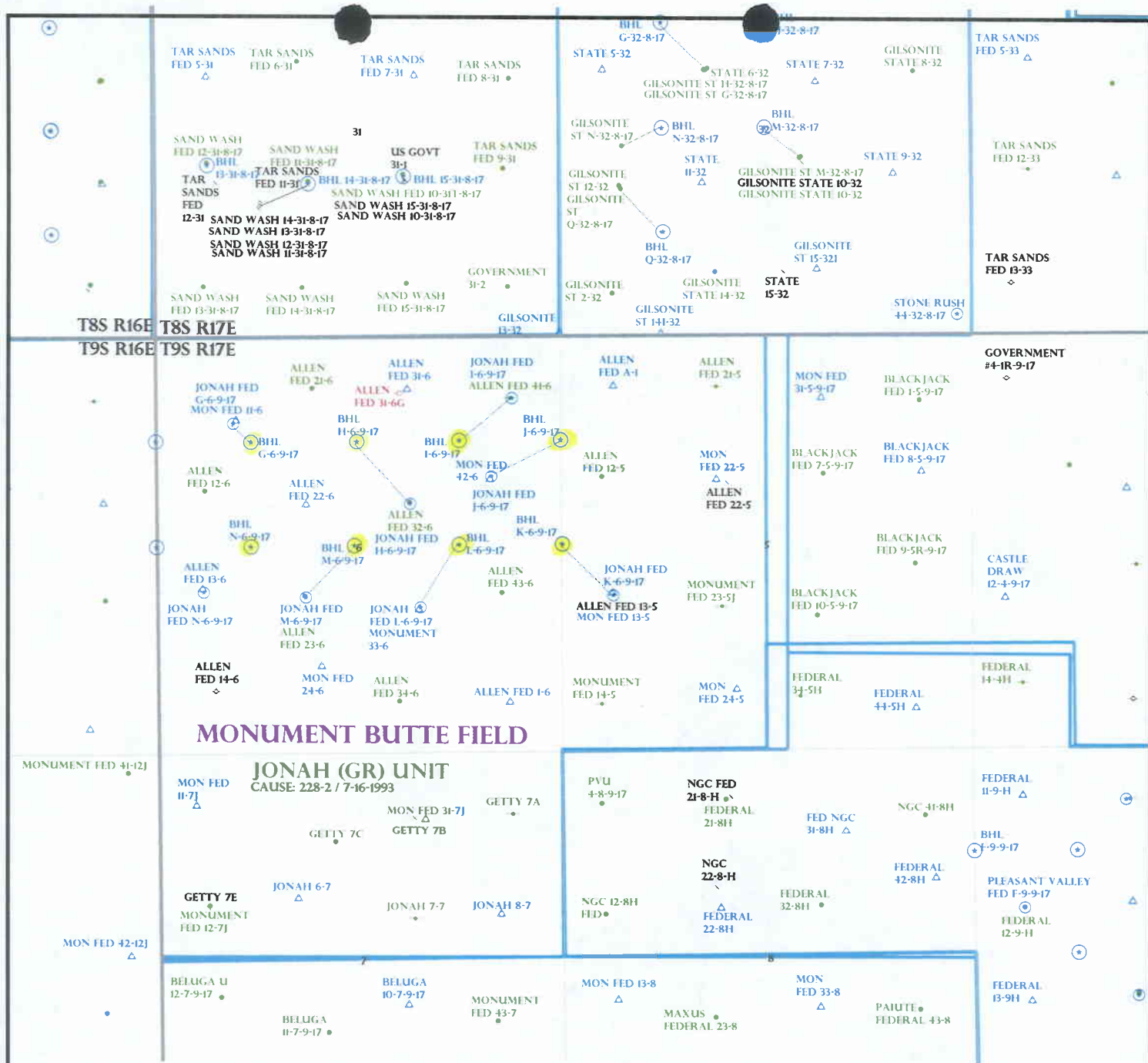
☒ Plat  
☒ Bond: Fed[1] Ind[] Sta[] Fee[]  
(No. UTB000192 )  
☒ Potash (Y/N)  
☒ Oil Shale 190-5 (B) or 190-3 or 190-13  
☒ Water Permit  
(No. MUNICIPAL )  
☒ RDCC Review (Y/N)  
(Date: )  
☒ Fee Surf Agreement (Y/N)  
☒ Intent to Commingle (Y/N)

LOCATION AND SITING:

\_\_\_ R649-2-3.  
Unit: JONAH (GREEN RIVER)  
\_\_\_ R649-3-2. General  
Siting: 460' From Qtr/Qtr & 920' Between Wells  
\_\_\_ R649-3-3. Exception  
☒ Drilling Unit  
Board Cause No: 228-2  
Eff Date: 7-16-93  
Siting: 460' fr u.bary & 920' fr other wells.  
☒ R649-3-11. Directional Drill

COMMENTS: Sor, September 5th

STIPULATIONS: 1. Early Approval



OPERATOR: NEWFIELD PROD CO (N2695)

SEC: 6 T.9S R. 17E

FIELD: MONUMENT BUTTE (105)

COUNTY: DUCHESNE

CAUSE: 228-2 / 7-16-1993

#### Field Status

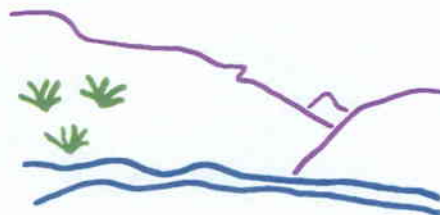
- ABANDONED
- ACTIVE
- COMBINED
- INACTIVE
- PROPOSED
- STORAGE
- TERMINATED

#### Unit Status

- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PENDING
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

#### Wells Status

- x GAS INJECTION
- x GAS STORAGE
- x LOCATION ABANDONED
- o NEW LOCATION
- x PLUGGED & ABANDONED
- o PRODUCING GAS
- o PRODUCING OIL
- o SHUT-IN GAS
- o SHUT-IN OIL
- x TEMP. ABANDONED
- o TEST WELL
- o WATER INJECTION
- o WATER SUPPLY
- o WATER DISPOSAL
- o DRILLING



Utah Oil Gas and Mining



PREPARED BY: DIANA MASON  
DATE: 19-JANUARY-2007



January 17, 2007

Ms. Diana Mason  
State of Utah, Div. of Oil, Gas and Mining  
P.O. Box 145801  
Salt Lake City, Utah 84114-5801

Re: Directional Drilling R649-3-11  
Jonah Unit UTU-72086A  
Various Wells & Locations (See Attached)  
Duchesne County, Utah

Dear Ms.Mason:

Pursuant to the filing of Newfield Production Company's (hereinafter "NPC") Applications for Permits to Drill dated 01/09/07 (copies enclosed herewith) which concern the wells described on the attached Exhibit, NPC is hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to Directional Drilling.

All of these drillsite locations are located within the boundaries of the Jonah Unit UTU-72086A. NPC is permitting these wells as directional wells in order to minimize surface disturbance. By locating the wells at the surface locations described and directionally drilling from these locations, NPC will be able to utilize the existing the existing roads and pipelines in the area.

Furthermore, NPC hereby certifies that NPC is the Jonah Unit Operator and all lands within 460 feet of each of the entire directional well bores are within the Jonah Unit.

Therefore, based on the above stated information NPC requests that the permits be granted pursuant to R649-3-11. Thank you for your consideration in this matter.

Sincerely,

Newfield Production Company

A handwritten signature in cursive script, appearing to read "Rhonda Deimer".

Rhonda Deimer  
Land Associate

Enclosures

**RECEIVED**

**JAN 22 2007**

**DIV. OF OIL, GAS & MINING**



**DIRECTIONAL DRILLING R649-3-11 WELL EXHIBIT  
JONAH UNIT UTU-72086A  
DUCHESNE COUNTY, UTAH**

Jonah Federal G-6-9-17

BLM Lease #s U-020252A (surface & bottomhole)  
1085' FNL, 990' FWL (at surface)  
1322' FNL, 1212' FWL (bottomhole)  
Section 6-T9S-R17E

Jonah Federal H-6-9-17

BLM Lease #s U-020252A (surface & bottomhole)  
2122' FNL, 1938' FEL (at surface)  
1320' FNL, 2622' FEL (bottomhole)  
Section 6-T9S-R17E

Jonah Federal I-6-9-17

BLM Lease #s U-020252A (surface & bottomhole)  
778' FNL, 627' FEL (at surface)  
1319' FNL, 1311' FEL (bottomhole)  
Section 6-T9S-R17E

Jonah Federal J-6-9-17

BLM Lease #s U-020252A (surface & bottomhole)  
1784' FNL, 900' FEL (at surface)  
1317' FNL, 0' FEL (bottomhole)  
Section 6-T9S-R17E

Jonah Federal K-6-9-17

BLM Lease #s U-020252 (surface) and U-020252A (bottomhole)  
1977' FSL, 664' FWL of Section 5-9S-17E (at surface)  
2644' FSL, 0' FEL of Section 6-9S-17E (bottomhole)  
Section 6-T9S-R17E

Jonah Federal L-6-9-17

BLM Lease #s U-020252A (surface & bottomhole)  
1846' FSL, 1813' FEL (at surface)  
2644' FSL, 1313' FEL (bottomhole)  
Section 6-T9S-R17E

Jonah Federal M-6-9-17

BLM Lease #s U-020252A (surface & bottomhole)  
1987' FSL, 1906' FWL (at surface)  
2643' FSL, 2533' FWL (bottomhole)  
Section 6-T9S-R17E

Jonah Federal N-6-9-17

BLM Lease #s U-020252A (surface & bottomhole)  
2060' FSL, 598' FWL (at surface)  
2642' FSL, 1213' FWL (bottomhole)  
Section 6-T9S-R17E

# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office  
P.O. Box 45155  
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:  
3160  
(UT-922)

January 24, 2007

### Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2007 Plan of Development Jonah Unit, Duchesne County,  
Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2007 within the Jonah Unit, Duchesne County, Utah.

| API #                     | WELL NAME  | LOCATION                              |
|---------------------------|--|---------------------------------------|
| (Proposed PZ Green River) |  |                                       |
| 43-013-33493              | Jonah Fed G-6-9-17 Sec 6 T09S R17E 1085 FNL 0990 FWL | BHL Sec 6 T09S R17E 1322 FNL 1212 FWL |
| 43-013-33494              | Jonah Fed H-6-9-17 Sec 6 T09S R17E 2122 FNL 1938 FEL | BHL Sec 6 T09S R17E 1320 FNL 2622 FEL |
| 43-013-33495              | Jonah Fed I-6-9-17 Sec 6 T09S R17E 0778 FNL 0627 FEL | BHL Sec 6 T09S R17E 1319 FNL 1311 FEL |
| 43-013-33496              | Jonah Fed J-6-9-17 Sec 6 T09S R17E 1784 FNL 0900 FEL | BHL Sec 6 T09S R17E 1317 FNL 0000 FEL |
| 43-013-33497              | Jonah Fed K-6-9-17 Sec 5 T09S R17E 1977 FSL 0664 FWL | BHL Sec 6 T09S R17E 2644 FSL 0000 FEL |
| 43-013-33498              | Jonah Fed L-6-9-17 Sec 6 T09S R17E 1846 FSL 1813 FEL | BHL Sec 6 T09S R17E 2644 FSL 1313 FEL |
| 43-013-33499              | Jonah Fed M-6-9-17 Sec 6 T09S R17E 1987 FSL 1906 FWL | BHL Sec 6 T09S R17E 2643 FSL 2533 FWL |
| 43-013-33500              | Jonah Fed N-6-9-17 Sec 6 T09S R17E 2060 FSL 0598 FWL | BHL Sec 6 T09S R17E 2642 FSL 1213 FWL |

Page 2

We have no objections to permitting the wells so long as the unit operator receives an exception to the locating and siting requirements of the State of Utah (R649-3-2).

/s/ Michael L. Coulthard

bcc: File – Jonah Unit  
Division of Oil Gas and Mining  
Central Files  
Agr. Sec. Chron  
Fluid Chron

MCoulthard:mc:1-24-07



**State of Utah**

**Department of  
Natural Resources**

MICHAEL R. STYLER  
*Executive Director*

**Division of  
Oil, Gas & Mining**

JOHN R. BAZA  
*Division Director*

JON M. HUNTSMAN, JR.  
*Governor*

GARY R. HERBERT  
*Lieutenant Governor*

January 30, 2007

Newfield Production Company  
Rt. #3, Box 3630  
Myton, UT 84052

Re: Jonah Federal I-6-9-17 Well, Surface Location 778' FNL, 627' FEL, NE NE,  
Sec. 6, T. 9 South, R. 17 East, Bottom Location 1319' FNL, 1311' FEL,  
SW NE, Sec. 6, T. 9 South, R. 17 East, Duchesne County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-013-33495.

Sincerely,

Gil Hunt  
Associate Director

pab  
Enclosures

cc: Duchesne County Assessor  
Bureau of Land Management, Vernal District Office

**Operator:** Newfield Production Company  
**Well Name & Number** Jonah Federal I-6-9-17  
**API Number:** 43-013-33495  
**Lease:** UTU-020252A

**Surface Location:** NE NE      **Sec.** 6      **T.** 9 South      **R.** 17 East  
**Bottom Location:** SW NE      **Sec.** 6      **T.** 9 South      **R.** 17 East

### Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. Notification Requirements

Notify the Division within 24 hours of spudding the well.

- Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

- Contact Dan Jarvis at (801) 538-5338

3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.

5. In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

JAN 16 2007

FORM APPROVED  
OMB No. 1004-0136  
Expires January 31, 2004

APPLICATION FOR PERMIT TO DRILL OR REENTER

VERNAL, UTAH

|  |  |  |
|--|--|--|
| 1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER   |  | 5. Lease Serial No.<br>UTU-020252A   |
| 1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone |  | 6. If Indian, Allottee or Tribe Name<br>N/A                                      |
| 2. Name of Operator<br>Newfield Production Company   |  | 7. If Unit or CA Agreement, Name and No.<br>Jonah Unit                           |
| 3a. Address<br>Route #3 Box 3630, Myton UT 84052   |  | 8. Lease Name and Well No.<br>Jonah Federal I-6-9-17                             |
| 3b. Phone No. (include area code)<br>(435) 646-3721  |  | 9. API Well No.<br>43-013-33495  |
| 4. Location of Well (Report location clearly and in accordance with any State requirements. *)<br>At surface NE/NE (Lot 1) 778' FNL 627' FEL<br>At proposed prod. zone SW/NE 1319' FNL 1311' FEL                       |  | 10. Field and Pool, or Exploratory<br>Monument Butte                             |
| 14. Distance in miles and direction from nearest town or post office*<br>Approximatley 13.3 miles southeast of Myton, Utah   |  | 11. Sec., T., R., M., or Blk. and Survey or Area<br>Sec. 6, T9S R17E             |
| 15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) Approx. 1311' f/lease, 1319' f/unit  | 16. No. of Acres in lease<br>637.35  | 12. County or Parish<br>Duchesne   |
| 17. Spacing Unit dedicated to this well<br>20 Acres  | 18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. Approx. 1204' | 13. State<br>UT  |
| 19. Proposed Depth<br>6180'  | 20. BLM/BIA Bond No. on file<br>UTB000192  |  |
| 21. Elevations (Show whether DF, KDB, RT, GL, etc.)<br>5270' GL  | 22. Approximate date work will start*<br>2nd Quarter 2007  | 23. Estimated duration<br>Approximately seven (7) days from spud to rig release. |

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

- |   |  |
|---|--|
| 1. Well plat certified by a registered surveyor.  | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).    |
| 2. A Drilling Plan.   | 5. Operator certification.   |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

|   |  |                  |
|---|--|------------------|
| 25. Signature<br>   | Name (Printed/Typed)<br>Mandie Crozier | Date<br>1/9/07   |
| Title<br>Regulatory Specialist                                |  |                  |
| Approved by (Signature)<br>                                   | Name (Printed/Typed)<br>JERRY KENCZEK  | Date<br>8-6-2007 |
| Title<br>Assistant Field Manager<br>Lands & Mineral Resources |  |                  |
| Office<br>VERNAL FIELD OFFICE                                 |  |                  |

Application approval does not warrant or certify the the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on reverse)

NOTICE OF APPROVAL

CONDITIONS OF APPROVAL ATTACHED

RECEIVED

AUG 13 2007

DIV. OF OIL, GAS & MINING

No NOS  
07PP1688A

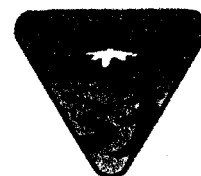


UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
VERNAL FIELD OFFICE

170 South 500 East

VERNAL, UT 84078

(435) 781-4400



**CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL**

Company: Newfield Production Company  
Well No: Jonah Federal I-6-9-17  
API No: 43-013-33495

Location: Lot 1, Sec 6, T9S, R17E  
Lease No: UTU-020252A  
Agreement: Jonah Unit

| Title                             | Name            | Office Phone Number | Cell Phone Number |
|-----------------------------------|-----------------|---------------------|-------------------|
| Petroleum Engineer:               | Matt Baker      | 435-781-4490        | 435-828-4470      |
| Petroleum Engineer:               | Michael Lee     | 435-781-4432        | 435-828-7875      |
| Petroleum Engineer:               | James Ashley    | 435-781-4470        | 435-828-7874      |
| Petroleum Engineer:               | Ryan Angus      | 435-781-4430        | 435-828-7368      |
| Supervisory Petroleum Technician: | Jamie Sparger   | 435-781-4502        | 435-828-3913      |
| NRS/Enviro Scientist:             | Paul Buhler     | 435-781-4475        | 435-828-4029      |
| NRS/Enviro Scientist:             | Karl Wright     | 435-781-4484        |                   |
| NRS/Enviro Scientist:             | Holly Villa     | 435-781-4404        |                   |
| NRS/Enviro Scientist:             | Chuck MacDonald | 435-781-4441        |                   |
| NRS/Enviro Scientist:             | Jannice Cutler  | 435-781-3400        |                   |
| NRS/Enviro Scientist:             | Michael Cutler  | 435-781-3401        |                   |
| NRS/Enviro Scientist:             | Anna Figueroa   | 435-781-3407        |                   |
| NRS/Enviro Scientist:             | Verlyn Pindell  | 435-781-3402        |                   |
| NRS/Enviro Scientist:             | Darren Williams | 435-781-4447        |                   |
| NRS/Enviro Scientist:             | Nathan Packer   | 435-781-3405        |                   |

Fax: 435-781-4410

**A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR  
FIELD REPRESENTATIVE TO INSURE COMPLIANCE**

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

**NOTIFICATION REQUIREMENTS**

|  |   |   |
|--|---|---|
| Location Construction<br>(Notify NRS/Enviro Scientist)                     | - | Forty-Eight (48) hours prior to construction of location and access roads.  |
| Location Completion<br>(Notify NRS/Enviro Scientist)                       | - | Prior to moving on the drilling rig.  |
| Spud Notice<br>(Notify Petroleum Engineer)                                 | - | Twenty-Four (24) hours prior to spudding the well.  |
| Casing String & Cementing<br>(Notify Supervisory Petroleum Technician)     | - | Twenty-Four (24) hours prior to running casing and cementing all casing strings   |
| BOP & Related Equipment Tests<br>(Notify Supervisory Petroleum Technician) | - | Twenty-Four (24) hours prior to initiating pressure tests   |
| First Production Notice<br>(Notify Petroleum Engineer)                     | - | Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days |

## **SURFACE USE PROGRAM CONDITIONS OF APPROVAL (COAs)**

### **General Surface COAs**

- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer AO. A report will be prepared by a BLM permitted paleontologist and submitted to the AO at the completion of surface disturbing activities.

### **Specific Surface COAs**

#### **STIPULATIONS:**

- Adhere to Executive Order 5327 of April 15, 1930, stipulations for lands in oil shale withdrawal.
- Lands in this lease have been identified as containing Mountain Plover, Ferruginous Hawk, and Red-tailed Hawk habitats. Modifications to the Surface Use Plan of Operations will be required in order to protect these wildlife species from surface disturbing activities in accordance with Section 6 of the lease term, Endangered Species Act, and 43 CFR 3101.1-2.
- Timing Limitations (during construction and drilling only):
  - **April 1 through July 15** – to protect Red-tailed Hawk nesting season
  - **March 1 through July 15** – to minimize disturbance during Ferruginous Hawk nesting season
  - **May 15 through June 15** – in order to protect Mountain Plover habitat

#### **CONDITIONS OF APPROVAL:**

- This well is being approved in accordance with Washington Instruction Memorandum 2005-247 and Section 390 (Category 3) of the Energy Policy Act which establishes statutory categorical exclusions (CX) under the National Environmental Policy Act (NEPA). Category 3 states that an oil or gas well can be drilled within a developed field for which an approved land use plan or any environmental document prepared pursuant to NEPA analyzed drilling as a reasonably foreseeable activity, so long as such plan or document was approved within five (5) years prior to the date of spudding the well. This well is covered under the *Final Environmental Impact Statement and Record of Decision Castle Peak and Eightmile Flat Oil and Gas Exploration Project Newfield Rocky Mountains Inc.*, signed August 24, 2005. If the well has not been spudded by August 24, 2010, a new environmental document will have to be prepared prior to the approval of the APD.
- All applicable local, state, and/or federal laws, regulations, and/or statutes will be complied with.
- All traffic related to this action will be restricted to approved routes. Cross-country vehicle travel will not be allowed.
- No vehicle travel, construction or routine maintenance activities shall be performed during periods when the soil is too wet to adequately support vehicles and/or construction equipment.



If such equipment creates ruts in excess of three inches deep in a straight line travel path, the soil shall be deemed too wet to adequately support construction equipment.

- The access road will be crowned and ditched. Flat-bladed roads are not allowed.
- If additional erosion occurs during the life of this project, more culverts, low water crossings, berms, wing ditches or etc. will be needed to control the erosion.
- Low-water crossings will be appropriately constructed to avoid sedimentation of drainage ways and other water resources.
- Pipelines will be buried at all major drainage crossings.
- Prevent fill and stock piles from entering drainages.
- The reserve pit will be lined with a 12 ml or greater liner and felt prior to spudding.
- The liner is to be cut 5 feet below ground surface or at the level of the cuttings, whichever is deeper, and the excess liner material is to be disposed of at an authorized disposal site.
- When the reserve pit contains fluids or toxic substances, the operator must ensure animals do not ingest or become entrapped in pit fluids.
- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation may be necessary for the discovered paleontologic material before construction can continue.
- If Uinta Basin hookless cactus or other special status plants are found, construction will cease and the AO will be notified to determine the appropriate mitigation.
- The following seed mix (PLS formula) will be used for interim reclamation:

|   |            |
|---|------------|
| Shadscale ( <i>Atriplex confertifolia</i> ):                        | 6 lbs/acre |
| Galleta Grass ( <i>Hilaria jamesii</i> )                            | 6 lbs/acre |
| ▪ Rates are set for drill seeding; double the rate if broadcasting. |            |
| ▪ Reseeding may be required if initial seeding is not successful.   |            |
- The operator will be responsible for treatment and control of invasive and noxious weeds. Prior to any treatment on BLM administered lands, a Pesticide Use Proposal will be submitted to the Vernal Field Office for approval.
- The topsoil from the reserve pit shall be stripped and piled separately near the reserve pit. When the reserve pit is closed, it shall be recontoured and the topsoil respread, and the area shall be seeded in the same manner as the location topsoil.
- Once the location is plugged and abandoned, it shall be recontoured to natural topography, topsoil shall be respread, and the entire location shall be seeded with a seed mix recommended by the AO (preferably of native origin). Seed application will follow all guidelines in the interim seed mix bullet statement above. If reclamation seeding should take place using the broadcast

method, the seed at a minimum will be walked into the soil with a dozer immediately after the seeding is completed.

- The authorized officer may prohibit surface disturbing activities during severe winter conditions to minimize watershed damage. This limitation does not apply to operation and maintenance of producing wells.
- The authorized officer may prohibit surface disturbing activities during wet or muddy conditions to minimize watershed damage. This limitation does not apply to operation and maintenance of producing wells.
- All well facilities not regulated by OSHA will be painted Carlsbad Canyon.
- All boulders with a length or diameter greater than 3 feet, that are found showing at the surface, will be stockpiled for use during final reclamation.
- Notify the Authorized Officer 48 hours prior to surface disturbing activities.

## **DOWNHOLE CONDITIONS OF APPROVAL**

### **SITE SPECIFIC DOWNHOLE CONDITIONS OF APPROVAL**

- None

**All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to.** The following items are emphasized:

### **DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS**

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- Blowout prevention equipment BOPE shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources such as Gilsonite, tar sands, oil shale, trona, etc. to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth from KB or GL of encounter, vertical footage of the encounter and, the name of the person making the report along with a telephone number should the BLM need to obtain additional information.
- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.

- Chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log CBL will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- **Please submit an electronic copy of all other logs run on this well in LAS format to UT\_VN\_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

## OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- In accordance with 43 CFR 3162.4-3, this well shall be reported on the "Monthly Report of Operations" Oil and Gas Operations Report OGOR starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 303 231-3650 for reporting information.
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
  - Operator name, address, and telephone number.
  - Well name and number.
  - Well location ¼¼, Sec., Twn, Rng, and P.M..
  - Date well was placed in a producing status date of first production for which royalty will be paid.
  - The nature of the well's production, i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons.
  - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - Unit agreement and/or participating area name and number, if applicable.
  - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees NTL 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events fires, accidents, blowouts, spills, discharges as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" BLM Form 3160-4 shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed

on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples cuttings, fluid, and/or gas shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" Form BLM 3160-5 must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

## DIVISION OF OIL, GAS AND MINING

### **SPUDDING INFORMATION**

Name of Company: NEWFIELD PRODUCTION COMPANY

Well Name: JONAH FED I-6-9-17

Api No: 43-013-33495 Lease Type: FEDERAL

Section 06 Township 09S Range 17E County DUCHESNE

Drilling Contractor PROPETROCO RIG # RATHOLE

### **SPUDDED:**

Date 09/10/07

Time 3:00 PM

How DRY

**Drilling will Commence:** \_\_\_\_\_

Reported by BRANDON HALL

Telephone # (435) 828-6110

Date 09/11/07 Signed CHD

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING  
ENTITY ACTION FORM - FORM 6

OPERATOR: NEWFIELD PRODUCTION COMPANY  
ADDRESS: RT. 3 BOX 3830  
MYTON, UT 84052

OPERATOR ACCT. NO. N2695

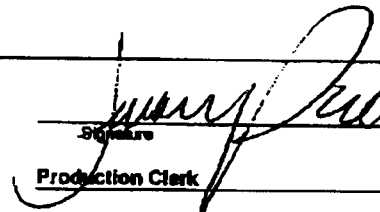
| ACTION CODE                      | CURRENT ENTITY NO. | NEW ENTITY NO. | API NUMBER | WELL NAME          | WELL LOCATION |    |    |     |          | SPUD DATE | EFFECTIVE DATE |
|----------------------------------|--------------------|----------------|------------|--------------------|---------------|----|----|-----|----------|-----------|----------------|
|                                  |                    |                |            |                    | QQ            | SC | TP | RG  | COUNTY   |           |                |
| B                                | 99999              | 11492          | 4301333493 | JONAH FED G-8-9-17 | NWNW          | 6  | 9S | 17E | DUCHESNE | 9/7/2007  | 9/25/07        |
| WELL 1 COMMENTS: GRUV BHL = NWNW |                    |                |            |                    |               |    |    |     |          |           |                |
| B                                | 99999              | 11492          | 4301333499 | JONAH FED M-6-9-17 | NESW          | 6  | 9S | 17E | DUCHESNE | 9/8/2007  | 9/25/07        |
| WELL 2 COMMENTS: GRUV BHL = NESW |                    |                |            |                    |               |    |    |     |          |           |                |
| B                                | 99999              | 11492          | 4301333495 | JONAH FED I-6-9-17 | SWNE          | 6  | 9S | 17E | DUCHESNE | 9/10/2007 | 9/25/07        |
| WELL 3 COMMENTS: GRUV BHL = SWNE |                    |                |            |                    |               |    |    |     |          |           |                |
| A                                | 99999              | 16364          | 4301333064 | FEDERAL 3-19-9-16  | NENW          | 19 | 9S | 16E | DUCHESNE | 9/12/2007 | 9/25/07        |
| WELL 4 COMMENTS: GRUV            |                    |                |            |                    |               |    |    |     |          |           |                |
|                                  |                    |                |            |                    |               |    |    |     |          |           |                |
| WELL 5 COMMENTS:                 |                    |                |            |                    |               |    |    |     |          |           |                |
|                                  |                    |                |            |                    |               |    |    |     |          |           |                |
| WELL 6 COMMENTS:                 |                    |                |            |                    |               |    |    |     |          |           |                |

ACTION CODES (See instructions on back of form)  
A - new entity for new well (single well only)  
B - well to existing entity (group or unit well)  
C - from one existing entity to another existing entity  
D - well from one existing entity to a new entity  
E - other (explain in comments section)

NOTE: Use COMMENT section to explain why each Action Code was selected.

RECEIVED  
SEP 13 2007

DIV. OF OIL, GAS & MINING

Signature:   
Jentri Park  
Production Clerk  
09/13/07  
Date



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0135  
Expires January 31, 2004

**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.**

5. Lease Serial No.

USA UTU-020252-A

6. If Indian, Allottee or Tribe Name.

7. If Unit or CA/Agreement, Name and/or  
JONAH UNIT

8. Well Name and No.

JONAH FEDERAL I-6-9-17

9. API Well No.

4301333495

10. Field and Pool, or Exploratory Area

MONUMENT BUTTE

11. County or Parish, State

DUCHESNE, UT

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

NEWFIELD PRODUCTION COMPANY

3a. Address Route 3 Box 3630

Myton, UT 84052

3b. Phone (include area code)

435.646.3721

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

778 FNL 627 FEL

NENE Section 6 T9S R17E

**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, OR OTHER DATA**

| TYPE OF SUBMISSION                                    | TYPE OF ACTION                         |   |   |   |  |
|---|--|---|---|---|--|
| <input type="checkbox"/> Notice of Intent             | <input type="checkbox"/> Acidize       | <input type="checkbox"/> Deepen           | <input type="checkbox"/> Production(Start/Resume) | <input type="checkbox"/> Water Shut-Off         |  |
| <input checked="" type="checkbox"/> Subsequent Report | <input type="checkbox"/> Alter Casing  | <input type="checkbox"/> Fracture Treat   | <input type="checkbox"/> Reclamation              | <input type="checkbox"/> Well Integrity         |  |
| <input type="checkbox"/> Final Abandonment            | <input type="checkbox"/> Casing Repair | <input type="checkbox"/> New Construction | <input type="checkbox"/> Recomplete               | <input checked="" type="checkbox"/> Other _____ |  |
|   | <input type="checkbox"/> Change Plans  | <input type="checkbox"/> Plug & Abandon   | <input type="checkbox"/> Temporarily Abandon      | Spud Notice                                     |  |
|   | <input type="checkbox"/> Convert to    | <input type="checkbox"/> Plug Back        | <input type="checkbox"/> Water Disposal           |   |  |

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

On 9/10/07 MIRU NDSI NS #1. Spud well @ 3:00 pm. Drill 320' of 12 1/4" hole with air mist. TIH W/ 7 Jt's 8 5/8" J-55 24 # csgn. Set @ 321.30' On 9/21/07 cement with 160 sks of class "G" w/ 3% CaCL2 + 1/4# sk Cello- Flake Mixed @ 15.8 ppg > 1.17 cf/ sk yeild. Returned 5 bbls cement to pit. WOC.

I hereby certify that the foregoing is true and correct (Printed/ Typed)

Don Bastian

Signature

*Don Bastian*

Title

Drilling Foreman

Date

09/21/2007

Approved by

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title

Office

Date

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious and fraudulent statements or representations as to any matter within its jurisdiction

(Instructions on reverse)

**RECEIVED**

**SEP 27 2007**

DIV. OF OIL, GAS & MINING

# NEWFIELD PRODUCTION COMPANY - CASING & CEMENT REPORT

8 5/8 CASING SET AT 321.3

LAST CASING 8 5/8" SET AT 321.30'  
 DATUM 12' KB  
 DATUM TO CUT OFF CASING \_\_\_\_\_  
 DATUM TO BRADENHEAD FLANGE \_\_\_\_\_  
 TD DRILLER 320' LOGGER \_\_\_\_\_  
 HOLE SIZE 12 1/4

OPERATOR NewField Production Company  
 WELL Jonah Federal I-6-9-17  
 FIELD/PROSPECT Monument Butte  
 CONTRACTOR & RIG # NDSI NS #1

## LOG OF CASING STRING:

| PIECES | OD     | ITEM - MAKE - DESCRIPTION | WT / FT | GRD  | THREAD | CONDT | LENGTH |
|--------|--------|---------------------------|---------|------|--------|-------|--------|
|        |        |                           |         |      |        |       |        |
|        |        |                           |         |      |        |       |        |
|        |        | Shoe Joint 41.60'         |         |      |        |       |        |
|        |        | WHI - 92 csg head         |         |      | 8rd    | A     | 0.95   |
| 7      | 8 5/8" | Maverick ST&C csg         | 24#     | J-55 | 8rd    | A     | 309.45 |
|        |        | <b>GUIDE</b> shoe         |         |      | 8rd    | A     | 0.9    |

|                         |       |     |                             |              |
|-------------------------|-------|-----|-----------------------------|--------------|
| CASING INVENTORY BAL.   | FEET  | JTS | TOTAL LENGTH OF STRING      | 311.3        |
| TOTAL LENGTH OF STRING  | 311.3 | 7   | LESS CUT OFF PIECE          | 2            |
| LESS NON CSG. ITEMS     | 1.85  |     | PLUS DATUM TO T/CUT OFF CSG | 12           |
| PLUS FULL JTS. LEFT OUT | 0     |     | CASING SET DEPTH            | <b>321.3</b> |

|                             |           |           |           |  |
|-----------------------------|-----------|-----------|-----------|--|
| TOTAL                       | 309.45    | 7         | } COMPARE |  |
| TOTAL CSG. DEL. (W/O THRDS) | 309.45    | 7         |           |  |
| TIMING                      | 1ST STAGE |           |           |  |
| BEGIN RUN CSG.              | Spud      | 9/10/2007 | 3:00 PM   | GOOD CIRC THRU JOB <u>Yes</u>                    |
| CSG. IN HOLE                |           | 9/11/2007 | 11:30 AM  | Bbls CMT CIRC TO SURFACE <u>5</u>                |
| BEGIN CIRC                  |           | 9/21/2007 | 11:16 AM  | RECIPROCATED PIPE FOR _____ THRU _____ FT STROKE |
| BEGIN PUMP CMT              |           | 9/21/2007 | 11:25 AM  | <u>N/A</u>                                       |
| BEGIN DSPL. CMT             |           | 9/21/2007 | 11:41 AM  | BUMPED PLUG TO <u>120</u> PSI                    |
| PLUG DOWN                   |           | 9/21/2007 | 11:54 AM  |  |

|   |      |   |
|---|------|---|
| CEMENT USED   |      | CEMENT COMPANY- <b>B. J.</b>  |
| STAGE   | # SX | CEMENT TYPE & ADDITIVES   |
| 1   | 160  | Class "G" w/ 2% CaCL2 + 1/4#/sk Cello-Flake mixed @ 15.8 ppg 1.17 cf/sk yield |
|   |      |   |
|   |      |   |
| CENTRALIZER & SCRATCHER PLACEMENT                     |      | SHOW MAKE & SPACING   |
| Centralizers - Middle first, top second & third for 3 |      |   |
|   |      |   |

COMPANY REPRESENTATIVE Don Bastian DATE 9/21/2007

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**SUNDRY NOTICES AND REPORTS ON WELLS**  
Do not use this form for proposals to drill or to re-enter an  
abandoned well. Use Form 3160-3 (APD) for such proposals.

FORM APPROVED  
OMB No. 1004-0135  
Expires January 31, 2004

5. Lease Serial No.  
USA UTU-020252-A

6. If Indian, Allottee or Tribe Name.

7. If Unit or CA/Agreement, Name and/or  
JONAH UNIT

8. Well Name and No.  
JONAH FEDERAL I-6-9-17

9. API Well No.  
4301333495

10. Field and Pool, or Exploratory Area  
MONUMENT BUTTE

11. County or Parish, State  
DUCHESSNE, UT

1. Type of Well  
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator  
NEWFIELD PRODUCTION COMPANY

3a. Address Route 3 Box 3630  
Myton, UT 84052

3b. Phone (include area code)  
435.646.3721

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
778 FNL 627 FEL  
NENE Section 6 T9S R17E

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, OR OTHER DATA

| TYPE OF SUBMISSION                                    | TYPE OF ACTION                         |   |   |   |
|---|--|---|---|---|
| <input type="checkbox"/> Notice of Intent             | <input type="checkbox"/> Acidize       | <input type="checkbox"/> Deepen           | <input type="checkbox"/> Production(Start/Resume) | <input type="checkbox"/> Water Shut-Off         |
| <input checked="" type="checkbox"/> Subsequent Report | <input type="checkbox"/> Alter Casing  | <input type="checkbox"/> Fracture Treat   | <input type="checkbox"/> Reclamation              | <input type="checkbox"/> Well Integrity         |
| <input type="checkbox"/> Final Abandonment            | <input type="checkbox"/> Casing Repair | <input type="checkbox"/> New Construction | <input type="checkbox"/> Recomplete               | <input checked="" type="checkbox"/> Other _____ |
|   | <input type="checkbox"/> Change Plans  | <input type="checkbox"/> Plug & Abandon   | <input type="checkbox"/> Temporarily Abandon      | Weekly Status Report                            |
|   | <input type="checkbox"/> Convert to    | <input type="checkbox"/> Plug Back        | <input type="checkbox"/> Water Disposal           |   |

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

On 10/8/07 MIRU NDSI Rig # 2. Set all equipment. Pressure test Kelly, TIW, Choke manifold, & Bop's to 2,000 psi. Test 8.625 csgn to 1,500 psi. Vernal BLM field, & Roosevelt DOGM office was notified of test. PU BHA and tag cement @ 271'. Drill out cement & shoe. Drill a 7.875 hole with fresh water to a depth of 6235'. Lay down drill string & BHA. Open hole log w/ Dig/SP/GR log's TD to surface. PU & TIH with Guide shoe, shoe jt, float collar, 161 jt's of 5.5 J-55, 15.5# csgn. Set @ 6221.72' / KB. Cement with 325 sks cement mixed @ 11.0 ppg & 3.43 yld. The 400 sks cement mixed @ 14.4 ppg & 1.24 yld. Returned 45 bbls of cement to reserve pit. Nipple down Bop's. Drop slips @ 76,000 #'s tension. Release rig @ 6:30am 10/16/07.

I hereby certify that the foregoing is true and correct (Printed/ Typed)

Don Bastian

Signature

*Don Bastian*

Title

Drilling Foreman

Date

10/16/2007

Approved by

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title

Date

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious and fraudulent statements or representations as to any matter within its jurisdiction

(Instructions on reverse)

RECEIVED

OCT 19 2007

DIV. OF OIL, GAS & MINING

# NEWFIELD PRODUCTION COMPANY - CASING & CEMENT REPORT

5 1/2" CASING SET AT 6221.72

Flt cllr @ 6181.95

LAST CASING 8 5/8" SET # 321.3

OPERATOR Newfield Production Company

DATUM 12' KB

WELL Jonah Federal I- 6-21-9-17

DATUM TO CUT OFF CASING 12'

FIELD/PROSPECT Monument Butte

DATUM TO BRADENHEAD FLANGE \_\_\_\_\_

CONTRACTOR & RIG # NDSI #2

TD DRILLER 6235' Loggers 6225'

TVD 6110'

HOLE SIZE 7 7/8"

## LOG OF CASING STRING:

| PIECES                      | OD     | ITEM - MAKE - DESCRIPTION | WT / FT   | GRD                         | THREAD | CONDT         | LENGTH  |         |
|-----------------------------|--------|---------------------------|-----------|-----------------------------|--------|---------------|---------|---------|
|                             |        | Landing Jt                |           |                             |        |               | 14      |         |
|                             |        | Short jt 4068' (6.82')    |           |                             |        |               |         |         |
| 161                         | 5 1/2" | ETC LT & C casing         | 15.5#     | J-55                        | 8rd    | A             | 6169.95 |         |
|                             |        | Float collar              |           |                             |        |               | 0.6     |         |
| 1                           | 5 1/2" | ETC LT&C csg              | 15.5#     | J-55                        | 8rd    | A             | 38.52   |         |
|                             |        | GUIDE shoe                |           |                             | 8rd    | A             | 0.65    |         |
| CASING INVENTORY BAL.       |        | FEET                      | JTS       | TOTAL LENGTH OF STRING      |        |               |         | 6223.72 |
| TOTAL LENGTH OF STRING      |        | 6223.72                   | 162       | LESS CUT OFF PIECE          |        |               |         | 14      |
| LESS NON CSG. ITEMS         |        | 15.25                     |           | PLUS DATUM TO T/CUT OFF CSG |        |               |         | 12      |
| PLUS FULL JTS. LEFT OUT     |        | 270.17                    | 7         | CASING SET DEPTH            |        |               |         | 6221.72 |
| TOTAL                       |        | 6478.64                   | 169       | } COMPARE                   |        |               |         |         |
| TOTAL CSG. DEL. (W/O THRDS) |        | 6478.64                   | 169       |                             |        |               |         |         |
| TIMING                      |        | 1ST STAGE                 | 2nd STAGE |                             |        |               |         |         |
| BEGIN RUN CSG.              |        | 10/15/2007                | 11:00 PM  | GOOD CIRC THRU JOB          |        | Yes           |         |         |
| CSG. IN HOLE                |        | 10/16/2007                | 3:00 AM   | Bbls CMT CIRC TO SURFACE    |        | 47            |         |         |
| BEGIN CIRC                  |        | 10/16/2007                | 3:11 AM   | RECIPROCATED PIPE FOR       |        | THRUSTROKE NA |         |         |
| BEGIN PUMP CMT              |        | 10/16/2007                | 4:48 AM   | DID BACK PRES. VALVE HOLD ? |        | Yes           |         |         |
| BEGIN DSPL. CMT             |        | 10/16/2007                | 5:45 AM   | BUMPED PLUG TO              |        | 1450 PSI      |         |         |
| PLUG DOWN                   |        | 10/16/2007                | 6:06 AM   |                             |        |               |         |         |

|   |      |   |  |
|---|------|---|--|
| CEMENT USED   |      | B. J.   |  |
| STAGE   | # SX | CEMENT TYPE & ADDITIVES   |  |
| 1   | 325  | Premilite II w/ 10% gel + 3 % KCL, 3#s /sk CSE + 2# sk/kolseal + 1/2#s/sk Cello Flake         |  |
|   |      | mixed @ 11.0 ppg W / 3.49 cf/sk yield   |  |
| 2   | 400  | 50/50 poz W/ 2% Gel + 3% KCL, .5%EC1, 1/4# sk C.F. 2% gel. 3% SM mixed @ 14.4 ppg W/ 1.24 YLD |  |
| CENTRALIZER & SCRATCHER PLACEMENT   |      | SHOW MAKE & SPACING   |  |
| Centralizers - Middle first, top second & third. Then every third collar for a total of 20. |      |   |  |
|   |      |   |  |
|   |      |   |  |

COMPANY REPRESENTATIVE Don Bastian

DATE 10/16/2007

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0135  
Expires January 31, 2004

**SUNDRY NOTICES AND REPORTS ON WELLS**  
Do not use this form for proposals to drill or to re-enter an  
abandoned well. Use Form 3160-3 (APD) for such proposals.

1. Type of Well  
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator  
NEWFIELD PRODUCTION COMPANY

3a. Address Route 3 Box 3630  
Myton, UT 84052

3b. Phone (include area code)  
435.646.3721

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
778 FNL 627 FEL  
NENE Section 6 T9S R17E

5. Lease Serial No.

USA UTU-020252-A

6. If Indian, Allottee or Tribe Name.

7. If Unit or CA/Agreement, Name and/or

JONAH UNIT

8. Well Name and No.

JONAH FEDERAL I-6-9-17

9. API Well No.

4301333495

10. Field and Pool, or Exploratory Area

MONUMENT BUTTE

11. County or Parish, State

DUCHESNE, UT

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, OR OTHER DATA

| TYPE OF SUBMISSION                                   | TYPE OF ACTION                         |   |  |   |
|--|--|---|--|---|
| <input checked="" type="checkbox"/> Notice of Intent | <input type="checkbox"/> Acidize       | <input type="checkbox"/> Deepen           | <input type="checkbox"/> Production(Start/Resume)  | <input type="checkbox"/> Water Shut-Off |
| <input type="checkbox"/> Subsequent Report           | <input type="checkbox"/> Alter Casing  | <input type="checkbox"/> Fracture Treat   | <input type="checkbox"/> Reclamation               | <input type="checkbox"/> Well Integrity |
| <input type="checkbox"/> Final Abandonment           | <input type="checkbox"/> Casing Repair | <input type="checkbox"/> New Construction | <input type="checkbox"/> Recomplete                | <input type="checkbox"/> Other          |
|  | <input type="checkbox"/> Change Plans  | <input type="checkbox"/> Plug & Abandon   | <input type="checkbox"/> Temporarily Abandon       |   |
|  | <input type="checkbox"/> Convert to    | <input type="checkbox"/> Plug Back        | <input checked="" type="checkbox"/> Water Disposal |   |

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Formation water is produced to a steel storage tank. If the production water meets quality guidelines, it is transported to the Ashley, Monument Butte, Jonah, and Beluga water injection facilities by company or contract trucks. Subsequently, the produced water is injected into approved Class II wells to enhance Newfield's secondary recovery project.

Water not meeting quality criteria, is disposed at Newfield's Pariette #4 disposal well (Sec. 7, T9S R19E) or at State of Utah approved surface disposal facilities.

Accepted by the  
Utah Division of  
Oil, Gas and Mining  
FOR RECORD ONLY

I hereby certify that the foregoing is true and  
correct (Printed/ Typed)

Mandie Crozier

Signature

Title

Regulatory Specialist

Date

11/19/2007

Approved by

Conditions of approval, if any, are attached. Approval of this notice does not warrant or  
certify that the applicant holds legal or equitable title to those rights in the subject lease  
which would entitle the applicant to conduct operations thereon.

Title

Date

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United  
States any false, fictitious and fraudulent statements or representations as to any matter within its jurisdiction

(Instructions on reverse)

RECEIVED

NOV 21 2007

DIV. OF OIL, GAS & MINING

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

5. LEASE DESIGNATION AND SERIAL NUMBER:  
USA UTU-020252-A

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:  
JONAH UNIT

1. TYPE OF WELL:

OIL WELL ☒ GAS WELL ☐ OTHER

8. WELL NAME and NUMBER:

JONAH FEDERAL I-6-9-17

2. NAME OF OPERATOR:

NEWFIELD PRODUCTION COMPANY

9. API NUMBER:

4301333495

3. ADDRESS OF OPERATOR:

Route 3 Box 3630 CITY Myton STATE UT ZIP 84052

PHONE NUMBER

435.646.3721

10. FIELD AND POOL, OR WILDCAT:

MONUMENT BUTTE

4. LOCATION OF WELL:

FOOTAGES AT SURFACE: 778 FNL 627 FEL

COUNTY: DUCHESNE

OTR/OTR. SECTION. TOWNSHIP. RANGE. MERIDIAN: NENE, 6, T9S, R17E

STATE: UT

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

| TYPE OF SUBMISSION   | TYPE OF ACTION  |  |  |
|--|---|--|--|
| <input type="checkbox"/> NOTICE OF INTENT<br>(Submit in Duplicate)<br><br>Approximate date work will<br><br>_____                      | <input type="checkbox"/> ACIDIZE<br><input type="checkbox"/> ALTER CASING<br><input type="checkbox"/> CASING REPAIR<br><input type="checkbox"/> CHANGE TO PREVIOUS PLANS<br><input type="checkbox"/> CHANGE TUBING<br><input type="checkbox"/> CHANGE WELL NAME<br><input type="checkbox"/> CHANGE WELL STATUS<br><input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS<br><input type="checkbox"/> CONVERT WELL TYPE | <input type="checkbox"/> DEEPEN<br><input type="checkbox"/> FRACTURE TREAT<br><input type="checkbox"/> NEW CONSTRUCTION<br><input type="checkbox"/> OPERATOR CHANGE<br><input type="checkbox"/> PLUG AND ABANDON<br><input type="checkbox"/> PLUG BACK<br><input type="checkbox"/> PRODUCTION (START/STOP)<br><input type="checkbox"/> RECLAMATION OF WELL SITE<br><input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION | <input type="checkbox"/> REPERFORATE CURRENT FORMATION<br><input type="checkbox"/> SIDETRACK TO REPAIR WELL<br><input type="checkbox"/> TEMPORARILY ABANDON<br><input type="checkbox"/> TUBING REPAIR<br><input type="checkbox"/> VENT OR FLAIR<br><input type="checkbox"/> WATER DISPOSAL<br><input type="checkbox"/> WATER SHUT-OFF<br><input checked="" type="checkbox"/> OTHER: - Weekly Status Report |
| <input checked="" type="checkbox"/> SUBSEQUENT REPORT<br>(Submit Original Form Only)<br><br>Date of Work Completion:<br><br>11/30/2007 |   |  |  |

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

The above subject well was completed on 11/09/07, attached is a daily completion status report.

NAME (PLEASE PRINT) Jentri Park

TITLE Production Clerk

SIGNATURE

DATE 11/30/2007

(This space for State use only)

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DIV. OF OIL, GAS & MINING

## Daily Activity Report

Format For Sundry

JONAH I-6-9-17

9/1/2007 To 1/30/2008

11/2/2007 Day: 1

Completion

Rigless on 11/1/2007 - Instal 5K frac head. NU 6" 5K Cameron BOP. RU H/O truck & pressure test casing, blind rams, frac head, csg & casing valves to 4500 psi. RU Perforators LLC WLT w/ mast & run CBL under pressure. WLTD @ 6124 & cement top @ 41'. Perforate stage #1, CP3 sds @ 5838-54' w/ 3-1/8" Slick Guns (19 gram, .49" HE, 120°) w/ 4 spf for total of 64 shots. 147 bbls EWTR. SIFN.

11/6/2007 Day: 2

Completion

Rigless on 11/5/2007 - RU BJ Services. 36 psi on well. Frac CP3 sds w/ 16,242#'s of 20/40 sand in 304 bbls of Lightning 17 fluid. Broke @ 1937 psi. Pumped 780 gals of fresh wtr mixed with 30 gals of Techni-Hib 767W. Treated w/ ave pressure of 2022 psi @ ave rate of 24.4 BPM. Pumped 504 gals of 15% HCL in flush for Stage #2. ISIP 1832 psi. Leave pressure on well. 451 BWTR RU Perforators WLT, crane & lubricator. RIH w/ Weatherford 5-1/2" 6K composite flow through frac plug & 9' perf gun. Set plug @ 5800'. Perforate CP1 sds @ 5739- 48' w/ 3-1/8" Slick Guns (19 gram, .49" HE, 120°, 21.92" pen, EXP-3319-331 Titan) w/ 4 spf for total of 36 shots. RU BJ Services. 1382 psi on well. Frac CP1 sds w/ 15,652#'s of 20/40 sand in 292 bbls of Lightning 17 fluid. Broke @ 3028 psi. Pumped 780 gals of fresh wtr mixed with 30 gals of Techni-Hib 767W. Treated w/ ave pressure of 2263 psi @ ave rate of 24.7 BPM. Pumped 504 gals of 15% HCL in flush for Stage #3. ISIP 2212 psi. Leave pressure on well. 743 BWTR RU Perforators WLT, crane & lubricator. RIH w/ Weatherford 5-1/2" 6K composite flow through frac plug & 10' perf gun. Set plug @ 5400'. Perforate A1 sds @ 5293- 5303' w/ 3-1/8" Slick Guns (19 gram, .49" HE, 120°, 21.92" pen, EXP-3319-331 Titan) w/ 4 spf for total of 40 shots. RU BJ Services. 1525 psi on well. Frac A1 sds w/ 54,446#'s of 20/40 sand in 496 bbls of Lightning 17 fluid. Broke @ 2824 psi. Pumped 780 gals of fresh wtr mixed with 30 gals of Techni-Hib 767W. Treated w/ ave pressure of 2261 psi @ ave rate of 24.8 BPM. Pumped 504 gals of 15% HCL in flush for Stage #4. ISIP 2369 psi. Leave pressure on well. 1239 BWTR RU Perforators WLT, crane & lubricator. RIH w/ Weatherford 5-1/2" 6K composite flow through frac plug & 15' perf gun. Set plug @ 5100'. Perforate C sds @ 4992- 5007' w/ 3-1/8" Slick Guns (19 gram, .49" HE, 120°, 21.92" pen, EXP-3319-331 Titan) w/ 4 spf for total of 60 shots. RU BJ Services. 1884 psi on well. Frac C sds w/ 39,458#'s of 20/40 sand in 409 bbls of Lightning 17 fluid. Broke @ 2405 psi. Pumped 780 gals of fresh wtr mixed with 30 gals of Techni-Hib 767W. Treated w/ ave pressure of 2368 psi @ ave rate of 24.8 BPM. Pumped 504 gals of 15% HCL in flush for Stage #5. ISIP 2713 psi. Leave pressure on well. 1639 BWTR RU Perforators WLT, crane & lubricator. RIH w/ Weatherford 5-1/2" 6K composite flow through frac plug & 8' perf gun. Set plug @ 4920'. Perforate D1 sds @ 4817- 25' w/ 3-1/8" Slick Guns (19 gram, .49" HE, 120°, 21.92" pen, EXP-3319-331 Titan) w/ 4 spf for total of 32 shots. RU BJ Services. 1757 psi on well. Frac D1 sds w/ 44,812#'s of 20/40 sand in 433 bbls of Lightning 17 fluid. Broke @ 1922 psi. Pumped 780 gals of fresh wtr mixed with 30 gals of Techni-Hib 767W. Treated w/ ave pressure of 2294 psi @ ave rate of 24.7 BPM. Pumped 504 gals of 15% HCL in flush for Stage #6. ISIP 2373 psi. Leave pressure on well. 2072 BWTR RU Perforators WLT, crane & lubricator. RIH w/ Weatherford 5-1/2" 6K composite flow through frac plug & 12' perf gun. Set plug @ 4450'. Perforate GB6 sds @ 4342- 54' w/ 3-1/8" Slick Guns (19 gram, .49" HE, 120°, 21.92" pen, EXP-3319-331 Titan) w/ 4 spf for total of 48 shots. RU BJ Services. 1763 psi on well. Frac GB6 sds w/

25,976#'s of 20/40 sand in 357 bbls of Lightning 17 fluid. Broke @ 1873 psi. Pumped 780 gals of fresh wtr mixed with 30 gals of Techni-Hib 767W. Treated w/ ave pressure of 2178 psi @ ave rate of 24.8 BPM. ISIP 2183 psi. Begin immediate flowback on 12/64 choke @ 1 BPM. Flowed for 6 1/2 hrs & died. Rec. 378 BTF. SIWFN w/ 2051 BWTR.

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11/7/2007 Day: 3

Completion

Western #1 on 11/6/2007 - SICP @ 875 psi. Blees well off. Stays flowing strong W/ high oil cut. RU Perforators LLC WLT, mast & lubricator. RIH W/ Weatherford 5 1/2" solid compsite bridge plug. Set plug @ 4248'. Bleed well off. RD WLT. MIRU Western #1. ND Cameron BOP & 5M frac head. Install 3M production tbg head & NU Weatherford Schaeffer BOP. Prep pump & tank. RU floor & tongs and talley tbg. SIFN W/ est 2051 BWTR.

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11/8/2007 Day: 4

Completion

Western #1 on 11/7/2007 - Talley, drift, PU & TIH W/ used Weatherford 4 3/4" "Chomp" bit, bit sub & new 2 7/8 8rd 6.5# J-55 tbg. Stopped & circulated hole W/ wtr halfway in. Tag kill plug @ 4248'. RU power swivel. Drill out kill plug (950 psi on well). Circ oil & gas f/ well. Con't PU tbg, C/O sd & drill out composite bridge plugs as follows (using conventional circulation): no sd, plug @ 4450' in 20 minutes; no sd, plug @ 4920' in 13 minutes; no sd, plug @ 5100' in 14 minutes; no sd, plug @ 5400' in 10 minutes; sd @ 5779', plug @ 5800' in 17 minutes. Circ well clean & hang back swivel. SIFN W/ EOT @ 5923'. SIFN W/ est 1751 BWTR. Gained est 300 BW & 100 BW during cleanout.

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11/9/2007 Day: 5

Completion

Western #1 on 11/8/2007 - Bleed well off--stays flowing steady W/ good oil cut. RU & circ well--returning to production tks. Con't PU & TIH W/ bit and tbg f/ 5923'. Tag fill @ 6091'. PU swivel. Drill plug remains & sd to PBTD @ 6182'. Circ hole clean--still flowing steady. Circ well W/ 150 bbls 10# brine wtr. Well fairly static. LD excess tbg. TOH W/ tbg--LD bit. TIH W/ BHA & production tbg as follows: 2 7/8 NC, 2 jts tbg, SN, 1 jt tbg, new CDI 5 1/2" TA (45K) & 184 jts 2 7/8 8rd 6.5# J-55 tbg. Well flowing again. Circ brine around again--fairly static. ND BOP. Set TA @ 5796' W/ SN @ 5831' & EOT @ 5895'. Land tbg W/ 16,000# tension. NU wellhead. Leave casing venting to production tks overnight. Estimating water loss @ 50 bbls for day. Est 1701 BWTR.

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11/10/2007 Day: 6

Completion

Western #1 on 11/9/2007 - Casing is flowing to tk battery. SITP @ 90 psi. Flush tbg W/ 40 bbls 10# brine wtr. PU & TIH W/ pump and "A" grade rod string as follows: new CDI 2 1/2" X 1 3/4" X 18' RHAC pump, 4-1 1/2" weight rods, 228-7/8" scraped rods (78 grade W/ 8 scrapers per rod), 1-8', 1-6' & 1-2' X 7/8" pony rod and 1 1/2" X 26' polished rod. Seat pump & RU pumping unit. W/ tbg full, pressure test tbg & pump to 200 psi. Stroke pump up W/ unit to 800 psi. Good pump action. RDMOSU. Est 1741 BWTR. Place well on production @ 2:00 PM 11/9/2007 W/ 122" SL @ 4 SPM. FINAL REPORT!!

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Pertinent Files: Go to File List

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DIV. OF OIL, GAS & MINING



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG\*

|  |  |   |  |  |  |   |  |  |  |  |  |   |  |                    |  |
|--|--|---|--|--|--|---|--|--|--|--|--|---|--|--------------------|--|
| 1a. TYPE OF WORK   |  | OIL WELL <input checked="" type="checkbox"/>  |  | GAS WELL <input type="checkbox"/>            |  | DRY <input type="checkbox"/>                        |  | Other _____                                    |  | 5. LEASE DESIGNATION AND SERIAL NO.<br>U-020252A                       |  |   |  |                    |  |
| 1b. TYPE OF WELL   |  | NEW WELL <input checked="" type="checkbox"/>  |  | WORK OVER <input type="checkbox"/>           |  | DEEPEN <input type="checkbox"/>                     |  | PLUG BACK <input type="checkbox"/>             |  | DIFF RESVR. <input type="checkbox"/>                                   |  | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME<br>NA                |  |                    |  |
|  |  |   |  |  |  |   |  |  |  |  |  | 7. UNIT AGREEMENT NAME<br>Jonah                           |  |                    |  |
|  |  |   |  |  |  |   |  |  |  |  |  | 8. FARM OR LEASE NAME, WELL NO.<br>Jonah Federal I-6-9-17 |  |                    |  |
| 2. NAME OF OPERATOR<br>Newfield Exploration Company  |  |   |  |  |  |   |  |  |  | 9. WELL NO.<br>43-013-33495  |  |   |  |                    |  |
| 3. ADDRESS AND TELEPHONE NO.<br>1401 17th St. Suite 1000 Denver, CO 80202  |  |   |  |  |  |   |  |  |  | 10. FIELD AND POOL OR WILDCAT<br>Monument Butte                        |  |   |  |                    |  |
| 4. LOCATION OF WELL (Report locations clearly and in accordance with any State requirements.)*<br>At Surface 1319' FSL & 1311' FWL (SW/NE) Sec. 6, T9S, R17E<br>At top prod. Interval reported below 718' fml 627' fcl per DKD |  |   |  |  |  |   |  |  |  | 11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA<br>Sec. 6, T9S, R17E |  |   |  |                    |  |
| 14. API NO.<br>43-013-33495  |  |   |  |  |  |   |  |  |  | DATE ISSUED<br>1/30/07   |  | 12. COUNTY OR PARISH<br>Duchesne                          |  | 13. STATE<br>UT    |  |
| 15. DATE SPUNDED<br>9/10/07  |  | 16. DATE T.D. REACHED<br>10/15/07   |  | 17. DATE COMPL. (Ready to prod.)<br>10/16/07 |  | 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*<br>5270' GL |  | 5282' KB                                       |  | 19. ELEV. CASINGHEAD   |  |   |  |                    |  |
| 20. TOTAL DEPTH, MD & TVD<br>6235' 6111  |  | 21. PLUG BACK T.D., MD & TVD<br>6182' 6055  |  | 22. IF MULTIPLE COMPL., HOW MANY*            |  | 23. INTERVALS DRILLED BY<br>----->                  |  | ROTARY TOOLS<br>X                              |  | CABLE TOOLS  |  |   |  |                    |  |
| 24. PRODUCING INTERVAL(S), OF THIS COMPLETION--TOP, BOTTOM, NAME (MD AND TVD)*<br>Green River 5838'-4354'  |  |   |  |  |  |   |  |  |  | 25. WAS DIRECTIONAL SURVEY MADE<br>Yes                                 |  |   |  |                    |  |
| 26. TYPE ELECTRIC AND OTHER LOGS RUN<br>Dual Induction Guard, SP, Compensated Density, Compensated Neutron, GR, Caliper, Cement Bond Log   |  |   |  |  |  |   |  |  |  | 27. WAS WELL CORED<br>No   |  |   |  |                    |  |
| 23. CASING RECORD (Report all strings set in well)   |  |   |  |  |  |   |  |  |  |  |  |   |  |                    |  |
| CASING SIZE/GRADE  |  | WEIGHT, LB./FT.   |  | DEPTH SET (MD)                               |  | HOLE SIZE   |  | TOP OF CEMENT, CEMENTING RECORD                |  | AMOUNT PULLED  |  |   |  |                    |  |
| 8-5/8" - J-55  |  | 24#   |  | 321'   |  | 12-1/4"   |  | To surface with 160 sx Class "G" cmt           |  |  |  |   |  |                    |  |
| 5-1/2" - J-55  |  | 15.5#   |  | 6235'  |  | 7-7/8"  |  | 325 sx Premilite II and 3400 sx 50/50 Poz      |  |  |  |   |  |                    |  |
| 29. LINER RECORD   |  |   |  |  |  |   |  |  |  |  |  | 30. TUBING RECORD   |  |                    |  |
| SIZE   |  | TOP (MD)  |  | BOTTOM (MD)                                  |  | SACKS CEMENT*                                       |  | SCREEN (MD)                                    |  | SIZE   |  | DEPTH SET (MD)  |  | PACKER SET (MD)    |  |
|  |  |   |  |  |  |   |  |  |  | 2-7/8"   |  | EOT @ 5895'   |  | TA @ 5796'         |  |
| 31. PERFORATION RECORD (Interval, size and number)   |  |   |  |  |  |   |  |  |  |  |  | 32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.            |  |                    |  |
| INTERVAL   |  | SIZE  |  | SPF/NUMBER                                   |  | DEPTH INTERVAL (MD)                                 |  | AMOUNT AND KIND OF MATERIAL USED               |  |  |  |   |  |                    |  |
| (CP3) 5838'-5854'  |  | .49"  |  | 4/64   |  | 5838'-5854'   |  | Frac w/ 16,242# 20/40 sand in 304 bbls fluid   |  |  |  |   |  |                    |  |
| (CP1) 5739'-5748'  |  | .49"  |  | 4/36   |  | 5739'-5748'   |  | Frac w/ 15652# 20/40 sand in 292 bbls fluid    |  |  |  |   |  |                    |  |
| (A1) 5293'-5303'   |  | .49"  |  | 4/40   |  | 5293'-5303'   |  | Frac w/ 54,446# 20/40 sand in 496 bbls fluid   |  |  |  |   |  |                    |  |
| (C) 4992'-5007'  |  | .49"  |  | 4/60   |  | 4992'-5007'   |  | Frac w/ 39,458# 20/40 sand in 409 bbls fluid   |  |  |  |   |  |                    |  |
| (D1) 4817'-4825'   |  | .49"  |  | 4/32   |  | 4817'-4825'   |  | Frac w/ 44,812 #s 20/40 sand in 433 bbls fluid |  |  |  |   |  |                    |  |
| (GB6) 4342'-4354'  |  | .49"  |  | 4/48   |  | 4342'-4354'   |  | Frac w/ 25976 #s 20/40 sand in 357 bbls fluid  |  |  |  |   |  |                    |  |
| 33.* PRODUCTION  |  |   |  |  |  |   |  |  |  |  |  |   |  |                    |  |
| DATE FIRST PRODUCTION<br>11/15/07  |  | PRODUCTION METHOD (Flowing, gas lift, pumping--size and type of pump)<br>2-1/2" x 1-3/4" x 18' RHAC SM Plunger Pump |  |  |  |   |  |  |  | WELL STATUS (Producing or shut-in)<br>PRODUCING                        |  |   |  |                    |  |
| DATE OF TEST<br>10day ave  |  | HOURS TESTED  |  | CHOKE SIZE                                   |  | PROD'N. FOR TEST PERIOD<br>----->                   |  | OIL--BBLs<br>95                                |  | GAS--MCF.<br>0   |  | WATER--BBL.<br>30   |  | GAS-OIL RATIO<br>0 |  |
| FLOW. TUBING PRESS.  |  | CASING PRESSURE   |  | CALCULATED 24-HOUR RATE<br>----->            |  | OIL--BBL.   |  | GAS--MCF.                                      |  | WATER--BBL.  |  | OIL GRAVITY-API (CORR.)                                   |  |                    |  |
| 34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)<br>Sold & Used for Fuel   |  |   |  |  |  |   |  |  |  | TEST WITNESSED BY<br>RECEIVED<br>DEC 19 2007                           |  |   |  |                    |  |
| 35. LIST OF ATTACHMENTS  |  |   |  |  |  |   |  |  |  |  |  |   |  |                    |  |
| 36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records  |  |   |  |  |  |   |  |  |  |  |  |   |  |                    |  |
| SIGNED<br>Tammi Lee  |  |   |  | TITLE<br>Production Clerk                    |  |   |  | DATE<br>11/29/2007                             |  |  |  | TL  |  |                    |  |

\*(See Instructions and Spaces for Additional Data on Reverse Side)

| 37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals, and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries); | 38. GEOLOGIC MARKERS |        |                             |   |
|---|----------------------|--------|-----------------------------|---|
| FORMATION   | TOP                  | BOTTOM | DESCRIPTION, CONTENTS, ETC. | <div>NAME</div> <div>MEAS. DEPTH</div> <div>TRUE VERT. DEPTH</div>  |
|   |                      |        | Well Name<br>Jonah I-6-9-17 | Garden Gulch Mkr<br>Garden Gulch 1<br>Garden Gulch 2<br>Point 3 Mkr<br>X Mkr<br>Y-Mkr<br>Douglas Creek Mkr<br>BiCarbonate Mkr<br>B Limestone Mkr<br>Castle Peak<br>Basal Carbonate<br>Total Depth (LOGGERS) |
|   |                      |        |                             | 3798'<br>4000'<br>4177'<br>4386'<br>4628'<br>4666'<br>4794'<br>5042'<br>5173'<br>5667'<br>6093'<br>6225'  |



**Scientific  
Drilling**

## Directional Survey Certification

7327 West Barton Road  
Casper, WY 82604  
(307)-472-6621 Fax (307) 472-5439

|           |                          |                            |
|-----------|--------------------------|----------------------------|
| RE: _____ | Newfield Exploration Co. | <b>Operator</b>            |
| _____     | Jonah Unit I-6-9-17      | <b>Well Name &amp; No.</b> |
| _____     | Duchesne County, UT      | <b>County &amp; State</b>  |
| _____     | 42DEF0710791             | <b>SDI Job No.</b>         |

I, Julie Cruse, having personal knowledge of all the facts, hereby certify that the attached directional survey run from a measured depth of 334 feet to a measured depth of 6235 feet is true and correct as determined from all available records.

Julie Cruse

Signature

Rockies Region Engineer

Title

Scientific Drilling International

Company

State of : Wyoming }

County of : Natrona }

ss

On this 21<sup>st</sup> day of October, 2007, before me personally appeared Julie Cruse to me known as the person described in and who executed the foregoing instrument and acknowledged that (s)he executed the same as his/her free act and deed.

Seal

Darci Neal

Notary Public

Aug 12, 2009

My Commission Expires

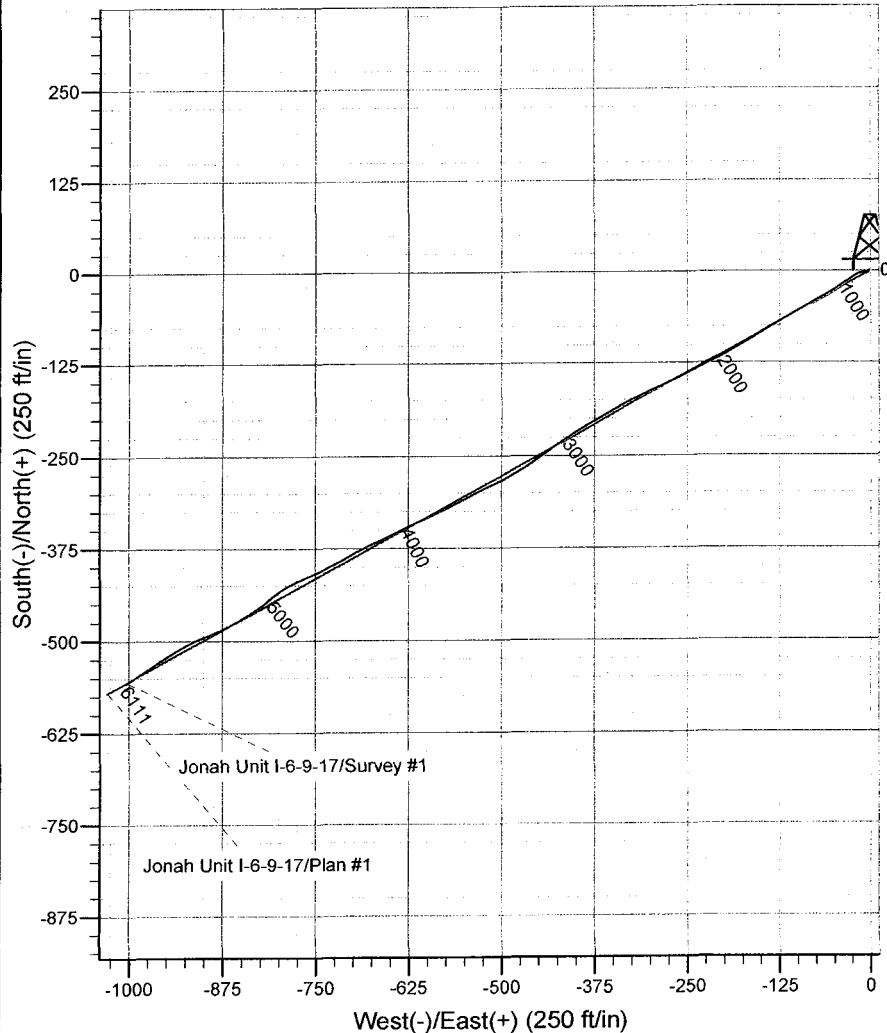
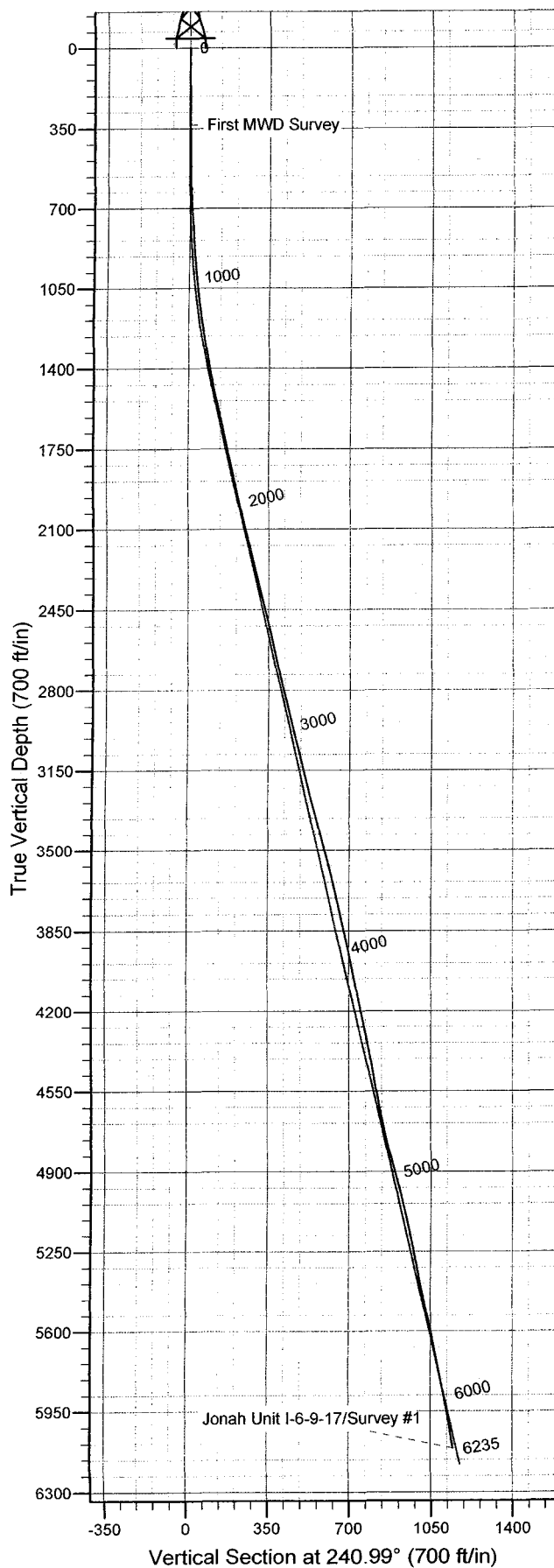




**Scientific Drilling**  
Rocky Mountain Operations

Project: Duchesne County, UT  
Site: Jonah Unit I-6-9-17  
Well: Jonah Unit I-6-9-17  
Wellbore: OH  
Design: OH

**Newfield Exploration Co.**



WELL DETAILS: Jonah Unit I-6-9-17

| +N-S | +E-W | Ground Level:   | GL 5270' & RKB 12' @ 5282.00ft |
|------|------|-----------------|--------------------------------|
| 0.00 | 0.00 | Northings       | Eastings                       |
|      |      | 7195737.33      | 2048401.18                     |
|      |      | Latitude        | Longitude                      |
|      |      | 40° 3' 53.980 N | 110° 2' 31.890 W               |

#### REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well Jonah Unit I-6-9-17, True North  
Vertical (TVD) Reference: GL 5270' & RKB 12' @ 5282.00ft  
Section (VS) Reference: Slot - (0.00N, 0.00E)  
Measured Depth Reference: GL 5270' & RKB 12' @ 5282.00ft  
Calculation Method: Minimum Curvature  
Local North: True  
Location: Sec 6 T9S R17E

PROJECT DETAILS: Duchesne County, UT

Geodetic System: US State Plane 1983  
Datum: North American Datum 1983  
Ellipsoid: GRS 1980  
Zone: Utah Central Zone

Survey: Survey #1 (Jonah Unit I-6-9-17/OH)

Created By: Julie Cruse Date: 2007-10-25

# **Newfield Exploration Co.**

Duchesne County, UT

Jonah Unit I-6-9-17

Jonah Unit I-6-9-17

OH

**Survey: Survey #1**

## **Standard Survey Report**

**25 October, 2007**

# Scientific Drilling

## Survey Report

|                  |                          |                                     |                                |
|------------------|--------------------------|-------------------------------------|--------------------------------|
| <b>Company:</b>  | Newfield Exploration Co. | <b>Local Co-ordinate Reference:</b> | Well Jonah Unit I-6-9-17       |
| <b>Project:</b>  | Duchesne County, UT      | <b>TVD Reference:</b>               | GL 5270' & RKB 12' @ 5282.00ft |
| <b>Site:</b>     | Jonah Unit I-6-9-17      | <b>MD Reference:</b>                | GL 5270' & RKB 12' @ 5282.00ft |
| <b>Well:</b>     | Jonah Unit I-6-9-17      | <b>North Reference:</b>             | True                           |
| <b>Wellbore:</b> | OH                       | <b>Survey Calculation Method:</b>   | Minimum Curvature              |
| <b>Design:</b>   | OH                       | <b>Database:</b>                    | EDM 2003.16 Single User Db     |

|                    |                           |                      |                |
|--------------------|---------------------------|----------------------|----------------|
| <b>Project</b>     | Duchesne County, UT       |                      |                |
| <b>Map System:</b> | US State Plane 1983       | <b>System Datum:</b> | Mean Sea Level |
| <b>Geo Datum:</b>  | North American Datum 1983 |                      |                |
| <b>Map Zone:</b>   | Utah Central Zone         |                      |                |

|                       |                                     |              |                 |                   |                  |
|-----------------------|-------------------------------------|--------------|-----------------|-------------------|------------------|
| Site                  | Jonah Unit I-6-9-17, Sec 6 T9S R17E |              |                 |                   |                  |
| Site Position:        |                                     | Northing:    | 7,195,737.34 ft | Latitude:         | 40° 3' 53.980 N  |
| From:                 | Lat/Long                            | Easting:     | 2,048,401.18 ft | Longitude:        | 110° 2' 31.890 W |
| Position Uncertainty: | 0.00 ft                             | Slot Radius: | in              | Grid Convergence: | 0.93 °           |

|                             |   |                            |                  |                      |                                    |
|-----------------------------|---|----------------------------|------------------|----------------------|------------------------------------|
| <b>Well</b>                 | Jonah Unit I-6-9-17, 778' FNL, 627' FEL |                            |                  |                      |                                    |
| <b>Well Position</b>        | <b>+N/-S</b>                            | 0.00 ft                    | <b>Northing:</b> | 7,195,737.33 ft      | <b>Latitude:</b> 40° 3' 53.980 N   |
|                             | <b>+E/-W</b>                            | 0.00 ft                    | <b>Easting:</b>  | 2,048,401.18 ft      | <b>Longitude:</b> 110° 2' 31.890 W |
| <b>Position Uncertainty</b> | 0.00 ft                                 | <b>Wellhead Elevation:</b> | ft               | <b>Ground Level:</b> | 5,270.00 ft                        |

|                  |                   |                    |                        |                      |                            |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| <b>Wellbore</b>  | OH                |                    |                        |                      |                            |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination (°)</b> | <b>Dip Angle (°)</b> | <b>Field Strength (nT)</b> |
|                  | IGRF2005-10       | 2007-10-05         | 11.77                  | 65.91                | 52,673                     |

|                          |                         |               |              |                      |      |
|--------------------------|-------------------------|---------------|--------------|----------------------|------|
| <b>Design</b>            | OH                      |               |              |                      |      |
| <b>Audit Notes:</b>      |                         |               |              |                      |      |
| <b>Version:</b>          | 1.0                     | <b>Phase:</b> | ACTUAL       | <b>Tie On Depth:</b> | 0.00 |
| <b>Vertical Section:</b> | <b>Depth From (TVD)</b> | <b>+N/-S</b>  | <b>+E/-W</b> | <b>Direction</b>     |      |
|                          | (ft)                    | (ft)          | (ft)         | (°)                  |      |
|                          | 0.00                    | 0.00          | 0.00         | 240.99               |      |

|                       |                |                          |                  |                    |  |
|-----------------------|----------------|--------------------------|------------------|--------------------|--|
| <b>Survey Program</b> | <b>Date</b>    | 2007-10-25               |                  |                    |  |
| <b>From (ft)</b>      | <b>To (ft)</b> | <b>Survey (Wellbore)</b> | <b>Tool Name</b> | <b>Description</b> |  |
| 334.00                | 6,235.00       | Survey #1 (OH)           | MWD              | MWD - Standard     |  |

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 0.00                | 0.00            | 0.00        | 0.00                | 0.00       | 0.00       | 0.00                  | 0.00                  | 0.00                 | 0.00                |
| 334.00              | 0.81            | 211.00      | 333.99              | -2.02      | -1.22      | 2.04                  | 0.24                  | 0.24                 | 0.00                |
| 365.00              | 0.89            | 231.09      | 364.99              | -2.36      | -1.52      | 2.47                  | 0.99                  | 0.26                 | 64.81               |
| 396.00              | 1.07            | 226.53      | 395.98              | -2.71      | -1.91      | 2.99                  | 0.63                  | 0.58                 | -14.71              |
| 426.00              | 0.69            | 242.96      | 425.98              | -2.99      | -2.28      | 3.44                  | 1.51                  | -1.27                | 54.77               |
| 457.00              | 0.87            | 266.86      | 456.97              | -3.09      | -2.68      | 3.84                  | 1.19                  | 0.58                 | 77.10               |
| 488.00              | 1.04            | 266.81      | 487.97              | -3.11      | -3.19      | 4.30                  | 0.55                  | 0.55                 | -0.16               |
| 519.00              | 1.22            | 276.12      | 518.96              | -3.09      | -3.80      | 4.83                  | 0.83                  | 0.58                 | 30.03               |
| 549.00              | 1.53            | 286.28      | 548.96              | -2.95      | -4.51      | 5.37                  | 1.31                  | 1.03                 | 33.87               |
| 580.00              | 2.01            | 282.71      | 579.94              | -2.71      | -5.43      | 6.07                  | 1.59                  | 1.55                 | -11.52              |
| 611.00              | 2.08            | 273.60      | 610.92              | -2.56      | -6.53      | 6.95                  | 1.07                  | 0.23                 | -29.39              |
| 642.00              | 2.48            | 268.54      | 641.90              | -2.54      | -7.76      | 8.02                  | 1.44                  | 1.29                 | -16.32              |
| 672.00              | 3.21            | 268.56      | 671.86              | -2.58      | -9.25      | 9.34                  | 2.43                  | 2.43                 | 0.07                |

# Scientific Drilling

## Survey Report

**Company:** Newfield Exploration Co.  
**Project:** Duchesne County, UT  
**Site:** Jonah Unit I-6-9-17  
**Well:** Jonah Unit I-6-9-17  
**Wellbore:** OH  
**Design:** OH

**Local Co-ordinate Reference:** Well Jonah Unit I-6-9-17  
**TVD Reference:** GL 5270' & RKB 12' @ 5282.00ft  
**MD Reference:** GL 5270' & RKB 12' @ 5282.00ft  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 2003.16 Single User Db

### Survey

| Measured<br>Depth<br>(ft) | Inclination<br>(°) | Azimuth<br>(°) | Vertical<br>Depth<br>(ft) | +N/-S<br>(ft) | +E/-W<br>(ft) | Vertical<br>Section<br>(ft) | Dogleg<br>Rate<br>(°/100ft) | Build<br>Rate<br>(°/100ft) | Turn<br>Rate<br>(°/100ft) |
|---------------------------|--------------------|----------------|---------------------------|---------------|---------------|-----------------------------|-----------------------------|----------------------------|---------------------------|
| 703.00                    | 3.46               | 261.66         | 702.81                    | -2.73         | -11.04        | 10.98                       | 1.52                        | 0.81                       | -22.26                    |
| 734.00                    | 4.03               | 252.25         | 733.74                    | -3.20         | -13.00        | 12.92                       | 2.70                        | 1.84                       | -30.35                    |
| 764.00                    | 3.93               | 248.53         | 763.67                    | -3.90         | -14.96        | 14.98                       | 0.92                        | -0.33                      | -12.40                    |
| 795.00                    | 3.88               | 241.39         | 794.60                    | -4.79         | -16.87        | 17.08                       | 1.58                        | -0.16                      | -23.03                    |
| 826.00                    | 4.36               | 237.40         | 825.52                    | -5.93         | -18.79        | 19.30                       | 1.80                        | 1.55                       | -12.87                    |
| 857.00                    | 4.24               | 232.44         | 856.43                    | -7.26         | -20.69        | 21.61                       | 1.26                        | -0.39                      | -16.00                    |
| 887.00                    | 4.56               | 237.37         | 886.34                    | -8.58         | -22.57        | 23.90                       | 1.65                        | 1.07                       | 16.43                     |
| 919.00                    | 4.68               | 236.55         | 918.24                    | -9.99         | -24.73        | 26.47                       | 0.43                        | 0.37                       | -2.56                     |
| 950.00                    | 5.29               | 234.70         | 949.12                    | -11.51        | -26.95        | 29.15                       | 2.03                        | 1.97                       | -5.97                     |
| 982.00                    | 5.99               | 237.86         | 980.96                    | -13.25        | -29.57        | 32.29                       | 2.39                        | 2.19                       | 9.87                      |
| 1,013.00                  | 6.04               | 239.61         | 1,011.79                  | -14.94        | -32.35        | 35.53                       | 0.61                        | 0.16                       | 5.65                      |
| 1,045.00                  | 6.70               | 238.00         | 1,043.60                  | -16.78        | -35.38        | 39.08                       | 2.14                        | 2.06                       | -5.03                     |
| 1,075.00                  | 6.77               | 236.55         | 1,073.39                  | -18.68        | -38.34        | 42.59                       | 0.61                        | 0.23                       | -4.83                     |
| 1,107.00                  | 7.25               | 236.04         | 1,105.15                  | -20.85        | -41.59        | 46.48                       | 1.51                        | 1.50                       | -1.59                     |
| 1,137.00                  | 7.61               | 239.22         | 1,134.90                  | -22.92        | -44.87        | 50.35                       | 1.82                        | 1.20                       | 10.60                     |
| 1,167.00                  | 8.08               | 237.15         | 1,164.62                  | -25.08        | -48.34        | 54.44                       | 1.83                        | 1.57                       | -6.90                     |
| 1,198.00                  | 8.34               | 240.71         | 1,195.30                  | -27.36        | -52.14        | 58.86                       | 1.84                        | 0.84                       | 11.48                     |
| 1,228.00                  | 8.92               | 239.28         | 1,224.96                  | -29.61        | -56.03        | 63.36                       | 2.06                        | 1.93                       | -4.77                     |
| 1,259.00                  | 8.86               | 239.09         | 1,255.59                  | -32.07        | -60.15        | 68.15                       | 0.22                        | -0.19                      | -0.61                     |
| 1,291.00                  | 9.38               | 241.45         | 1,287.18                  | -34.58        | -64.55        | 73.22                       | 2.00                        | 1.62                       | 7.37                      |
| 1,322.00                  | 9.54               | 240.36         | 1,317.76                  | -37.06        | -69.00        | 78.32                       | 0.77                        | 0.52                       | -3.52                     |
| 1,353.00                  | 10.31              | 239.60         | 1,348.30                  | -39.73        | -73.63        | 83.66                       | 2.52                        | 2.48                       | -2.45                     |
| 1,384.00                  | 10.76              | 238.74         | 1,378.78                  | -42.64        | -78.50        | 89.33                       | 1.54                        | 1.45                       | -2.77                     |
| 1,415.00                  | 11.39              | 240.44         | 1,409.20                  | -45.65        | -83.63        | 95.28                       | 2.29                        | 2.03                       | 5.48                      |
| 1,445.00                  | 11.75              | 239.45         | 1,438.59                  | -48.66        | -88.84        | 101.29                      | 1.37                        | 1.20                       | -3.30                     |
| 1,476.00                  | 11.74              | 240.52         | 1,468.94                  | -51.82        | -94.30        | 107.60                      | 0.70                        | -0.03                      | 3.45                      |
| 1,508.00                  | 12.37              | 240.17         | 1,500.23                  | -55.13        | -100.11       | 114.29                      | 1.98                        | 1.97                       | -1.09                     |
| 1,601.00                  | 12.98              | 239.04         | 1,590.97                  | -65.46        | -117.71       | 134.68                      | 0.71                        | 0.66                       | -1.22                     |
| 1,695.00                  | 13.18              | 240.35         | 1,682.53                  | -76.19        | -136.07       | 155.95                      | 0.38                        | 0.21                       | 1.39                      |
| 1,791.00                  | 12.74              | 238.32         | 1,776.08                  | -87.16        | -154.59       | 177.47                      | 0.66                        | -0.46                      | -2.11                     |
| 1,885.00                  | 12.52              | 240.41         | 1,867.81                  | -97.64        | -172.28       | 198.01                      | 0.54                        | -0.23                      | 2.22                      |
| 1,980.00                  | 12.13              | 238.95         | 1,960.62                  | -107.87       | -189.78       | 218.28                      | 0.53                        | -0.41                      | -1.54                     |
| 2,072.00                  | 13.19              | 240.61         | 2,050.38                  | -118.01       | -207.21       | 238.44                      | 1.22                        | 1.15                       | 1.80                      |
| 2,166.00                  | 13.37              | 244.29         | 2,141.87                  | -127.98       | -226.34       | 260.01                      | 0.92                        | 0.19                       | 3.91                      |
| 2,260.00                  | 13.30              | 242.43         | 2,233.34                  | -137.70       | -245.72       | 281.67                      | 0.46                        | -0.07                      | -1.98                     |
| 2,355.00                  | 14.24              | 244.68         | 2,325.60                  | -147.76       | -265.97       | 304.26                      | 1.14                        | 0.99                       | 2.37                      |
| 2,449.00                  | 13.98              | 243.62         | 2,416.77                  | -157.75       | -286.59       | 327.14                      | 0.39                        | -0.28                      | -1.13                     |
| 2,543.00                  | 13.76              | 244.49         | 2,508.03                  | -167.61       | -306.85       | 349.64                      | 0.32                        | -0.23                      | 0.93                      |
| 2,637.00                  | 13.24              | 242.98         | 2,599.43                  | -177.31       | -326.53       | 371.55                      | 0.67                        | -0.55                      | -1.61                     |
| 2,732.00                  | 11.77              | 240.25         | 2,692.18                  | -187.06       | -344.64       | 392.12                      | 1.67                        | -1.55                      | -2.87                     |
| 2,825.00                  | 13.00              | 241.71         | 2,783.01                  | -196.73       | -362.08       | 412.06                      | 1.36                        | 1.32                       | 1.57                      |
| 2,920.00                  | 14.37              | 240.56         | 2,875.31                  | -207.59       | -381.76       | 434.53                      | 1.47                        | 1.44                       | -1.21                     |
| 3,014.00                  | 13.45              | 236.44         | 2,966.56                  | -219.36       | -401.03       | 457.10                      | 1.44                        | -0.98                      | -4.38                     |
| 3,108.00                  | 14.66              | 236.05         | 3,057.74                  | -232.05       | -420.01       | 479.85                      | 1.29                        | 1.29                       | -0.41                     |
| 3,202.00                  | 13.82              | 232.26         | 3,148.85                  | -245.57       | -438.75       | 502.80                      | 1.33                        | -0.89                      | -4.03                     |
| 3,294.00                  | 14.22              | 235.99         | 3,238.11                  | -258.61       | -456.81       | 524.91                      | 1.07                        | 0.43                       | 4.05                      |
| 3,387.00                  | 15.09              | 238.57         | 3,328.09                  | -271.31       | -476.61       | 548.39                      | 1.17                        | 0.94                       | 2.77                      |
| 3,479.00                  | 15.01              | 243.19         | 3,416.94                  | -282.93       | -497.46       | 572.26                      | 1.31                        | -0.09                      | 5.02                      |
| 3,573.00                  | 15.00              | 245.15         | 3,507.73                  | -293.53       | -519.36       | 596.55                      | 0.54                        | -0.01                      | 2.09                      |
| 3,666.00                  | 14.21              | 241.05         | 3,597.73                  | -304.12       | -540.27       | 619.97                      | 1.40                        | -0.85                      | -4.41                     |
| 3,761.00                  | 13.12              | 242.80         | 3,690.04                  | -314.69       | -560.07       | 642.41                      | 1.23                        | -1.15                      | 1.84                      |
| 3,855.00                  | 13.22              | 244.36         | 3,781.57                  | -324.22       | -579.25       | 663.80                      | 0.39                        | 0.11                       | 1.66                      |
| 3,949.00                  | 12.02              | 245.09         | 3,873.29                  | -332.99       | -597.81       | 684.30                      | 1.29                        | -1.28                      | 0.78                      |
| 4,043.00                  | 11.39              | 244.28         | 3,965.34                  | -341.14       | -615.05       | 703.33                      | 0.69                        | -0.67                      | -0.86                     |

# Scientific Drilling

## Survey Report

Company: Newfield Exploration Co.  
Project: Duchesne County, UT  
Site: Jonah Unit I-6-9-17  
Well: Jonah Unit I-6-9-17  
Wellbore: OH  
Design: OH

Local Co-ordinate Reference: Well Jonah Unit I-6-9-17  
TVD Reference: GL 5270' & RKB 12' @ 5282.00ft  
MD Reference: GL 5270' & RKB 12' @ 5282.00ft  
North Reference: True  
Survey Calculation Method: Minimum Curvature  
Database: EDM 2003.16 Single User Db

### Survey

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 4,135.00            | 11.22           | 243.51      | 4,055.55            | -349.08    | -631.25    | 721.34                | 0.25                  | -0.18                | -0.84               |
| 4,227.00            | 11.80           | 242.94      | 4,145.70            | -357.35    | -647.64    | 739.68                | 0.64                  | 0.63                 | -0.62               |
| 4,319.00            | 11.37           | 246.64      | 4,235.83            | -365.23    | -664.34    | 758.11                | 0.93                  | -0.47                | 4.02                |
| 4,414.00            | 11.82           | 245.14      | 4,328.89            | -373.03    | -681.76    | 777.13                | 0.57                  | 0.47                 | -1.58               |
| 4,509.00            | 9.92            | 239.53      | 4,422.18            | -381.27    | -697.65    | 795.02                | 2.29                  | -2.00                | -5.91               |
| 4,605.00            | 9.56            | 239.74      | 4,516.80            | -389.48    | -711.66    | 811.25                | 0.38                  | -0.37                | 0.22                |
| 4,698.00            | 10.79           | 242.74      | 4,608.34            | -397.36    | -726.07    | 827.68                | 1.44                  | 1.32                 | 3.23                |
| 4,793.00            | 12.12           | 243.55      | 4,701.44            | -405.87    | -742.90    | 846.53                | 1.41                  | 1.40                 | 0.85                |
| 4,883.00            | 14.27           | 247.58      | 4,789.06            | -414.31    | -761.62    | 866.99                | 2.60                  | 2.39                 | 4.48                |
| 4,975.00            | 15.02           | 242.18      | 4,878.08            | -424.20    | -782.65    | 890.17                | 1.69                  | 0.82                 | -5.87               |
| 5,069.00            | 15.15           | 231.53      | 4,968.86            | -437.53    | -803.04    | 914.47                | 2.95                  | 0.14                 | -11.33              |
| 5,163.00            | 13.20           | 232.62      | 5,059.99            | -451.69    | -821.19    | 937.21                | 2.09                  | -2.07                | 1.16                |
| 5,256.00            | 11.86           | 236.76      | 5,150.77            | -463.38    | -837.62    | 957.25                | 1.73                  | -1.44                | 4.45                |
| 5,349.00            | 11.81           | 240.75      | 5,241.80            | -473.27    | -853.92    | 976.29                | 0.88                  | -0.05                | 4.29                |
| 5,442.00            | 10.50           | 240.37      | 5,333.04            | -482.11    | -869.59    | 994.29                | 1.41                  | -1.41                | -0.41               |
| 5,536.00            | 11.60           | 248.04      | 5,425.30            | -489.87    | -885.80    | 1,012.23              | 1.95                  | 1.17                 | 8.16                |
| 5,629.00            | 12.33           | 249.18      | 5,516.28            | -496.90    | -903.75    | 1,031.34              | 0.83                  | 0.78                 | 1.23                |
| 5,723.00            | 11.91           | 240.49      | 5,608.19            | -505.25    | -921.57    | 1,050.97              | 1.99                  | -0.45                | -9.24               |
| 5,815.00            | 11.53           | 239.63      | 5,698.27            | -514.57    | -937.77    | 1,069.66              | 0.45                  | -0.41                | -0.93               |
| 5,910.00            | 11.45           | 235.15      | 5,791.37            | -524.76    | -953.70    | 1,088.53              | 0.94                  | -0.08                | -4.72               |
| 6,004.00            | 10.63           | 235.54      | 5,883.63            | -535.00    | -968.50    | 1,106.44              | 0.88                  | -0.87                | 0.41                |
| 6,098.00            | 10.37           | 238.06      | 5,976.06            | -544.38    | -982.83    | 1,123.52              | 0.56                  | -0.28                | 2.68                |
| 6,185.00            | 9.31            | 237.25      | 6,061.78            | -552.33    | -995.40    | 1,138.37              | 1.23                  | -1.22                | -0.93               |
| 6,235.00            | 9.31            | 237.25      | 6,111.12            | -556.70    | -1,002.20  | 1,146.44              | 0.00                  | 0.00                 | 0.00                |

### Targets

#### Target Name

| - hit/miss target  | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (ft) | Easting (ft) | Latitude        | Longitude        |
|--|---------------|--------------|----------|------------|------------|---------------|--------------|-----------------|------------------|
| - Shape  |               |              |          |            |            |               |              |                 |                  |
| I-6-9-17 Target  | 0.00          | 0.00         | 5,200.00 | -462.00    | -833.00    | 7,195,261.82  | 2,047,575.82 | 40° 3' 49.414 N | 110° 2' 42.605 W |
| - survey misses by 14.70ft at 5303.23ft MD (5196.99 TVD, -468.54 N, -845.82 E) |               |              |          |            |            |               |              |                 |                  |
| - Circle (radius 75.00)  |               |              |          |            |            |               |              |                 |                  |

### Survey Annotations

| Measured Depth (ft) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Comment          |
|---------------------|---------------------|------------|------------|------------------|
| 334.00              | 333.99              | -2.02      | -1.22      | First MWD Survey |
| 6,235.00            | 6,111.12            | -556.70    | -1,002.20  | Projection to TD |

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_